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Facility/Site City: Greensboro

Facility/Site State: North Carolina

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Subject:  
 September 2016 Annual Groundwater and Semiannual Surface Water Sampling Report, Former Ashland Facility, Greensboro, North Carolina  
 EPA ID No: NCD 024 599 011

ENVIRONMENT

Dear Mr. Babuin:

On behalf of Ashland LLC (Ashland), Arcadis G&M of North Carolina, Inc. (Arcadis) is pleased to submit this report summarizing results of the September 2016 annual groundwater sampling event and two semiannual surface water sampling events in March and September 2016 at the former Ashland facility (the "Facility") in Greensboro, North Carolina. The investigation area within and downgradient of the Facility is herein referred to as the "Site." The groundwater and surface water monitoring events were performed by Antea Group (Antea) of Charlotte, North Carolina, under the direction of Arcadis and in accordance with the sampling and analysis plan included in the Corrective Measures Study (CMS) submitted to the North Carolina Department of Environmental Quality (NCDEQ) on October 3, 2014 (Arcadis 2014). Monitoring activities included groundwater elevation measurements, groundwater field parameter measurements, well-head inspections, and groundwater and surface water sampling. The layout of the Site and surrounding properties is depicted on **Figure 1** and the Site well network is depicted on **Figure 2**.

Date:  
 February 7, 2017

Contact:  
 Ryan Gerber

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## ANNUAL GROUNDWATER MONITORING ACTIVITIES

### Depth-to-Groundwater Measurements and Potentiometric Surface Results

On September 19, 2016, Antea gauged the depths-to-groundwater in all accessible monitoring wells in the Ashland monitoring well network using a QED® oil/water interface probe. To prevent cross-contamination, the water level meter was cleaned with a distilled water and Alconox solution, and then rinsed with distilled water prior to insertion into each monitoring well.

Depth-to-groundwater measurements were used to calculate groundwater elevations and to generate a groundwater potentiometric surface map for the shallow aquifer zone at the Site. Screen intervals, total depths, top of casing elevations, depth-to-groundwater measurements, and groundwater elevations for each monitoring well are presented in **Table 1**. Groundwater elevations and the groundwater potentiometric surface elevation in the shallow aquifer zone are shown on **Figure 3**.

The horizontal potentiometric gradient in the shallow aquifer generally ranged between 0.026 feet per foot (ft/ft) and 0.037 ft/ft toward the southeast across the Site based on evaluation of the groundwater elevations measured in September 2016. The groundwater gradients in September 2016 were similar to historical average gradients.

The vertical hydraulic gradients between shallow and deep monitoring well pairs within the identified plume extent during the September 2016 monitoring event ranged from 0.046 ft/ft upward at MW-2/2D to 0.062 ft/ft downward measured at MW-22/22BR and were generally consistent with historical gradients. The well pair MW-29S/D, closest to the unnamed stream, had an upward vertical gradient of 0.029 ft/ft in September 2016 which suggests that the unnamed stream continues to be a discharge zone for groundwater in the saprolite (shallow) and partially weathered rock (deep) aquifer zones.

### **Monitor Well Sampling Methodologies**

Antea purged each of the each monitoring well selected for sampling under low-flow conditions (approximately 200 milliliters per minute) after collecting water level measurements. Dedicated QED® bladder pumps were present in each monitoring well installed prior to 2006. Monitoring wells MW-27S/D, MW-29S/D, and MW-30, installed after 2006, are not equipped with dedicated bladder pumps; therefore, these wells were purged with a Monsoon electric submersible pump, which was decontaminated before insertion into each well.

Field parameters including temperature, pH, dissolved oxygen, oxidation-reduction potential, and electrical conductivity were measured during purging using a YSI Pro multi-parameter probe to ensure that groundwater conditions had stabilized prior to collecting samples for laboratory analysis. Copies of the field sampling logs are included in **Attachment 1**.

After the parameters had stabilized, a groundwater sample was collected in laboratory-provided bottles. Each sample bottle was appropriately labeled with the sample number, collection time and date, and the required laboratory analysis. All sample bottles were then placed in an ice-filled cooler along with chain-of-custody documentation and shipped via FedEx to TestAmerica in Savannah, Georgia - a North Carolina State-certified laboratory. Samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B and samples from five monitoring wells were analyzed for semi-volatile organic compounds (SVOCs) by USEPA Method 8270C. Purged groundwater was containerized in a 55-gallon steel drum stored at the Facility and was picked up for proper disposal on November 19, 2016. A copy of the waste manifest is included in **Attachment 2**.

Quality assurance/quality control samples were also collected to confirm the laboratory data and field procedure quality. Two duplicate samples were collected for VOC analyses from monitoring wells MW-12D and MW-16 for quality assurance purposes. Results for the duplicate samples were within acceptable quality control limits.

### Groundwater Analytical Results

Analytical results for all detected constituents and field parameters from the September 2016 sampling event are presented in **Table 2** and a tabulated summary of historical groundwater data is included in **Attachment 3**. The laboratory data reports from the September 2016 groundwater sampling, including chain-of-custody documentation, are provided in **Attachment 4**.

Constituent concentrations in most monitoring wells were generally stable or fluctuating over time with no discernable trends based on review of the September 2016 data and historical data with two wells showing some attenuation of PCE concentrations over time. Monitoring well MW-7S continued to exhibit significant attenuation with PCE detected at 1.7 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in September 2016 versus a range from 3.2 to 1,900  $\mu\text{g}/\text{L}$  during previous sampling events since 1994 (see **Attachment 3** for historical data). Monitoring well MW-3 continues to show moderate attenuation and some fluctuations over time with PCE detected at 15,000  $\mu\text{g}/\text{L}$  in September 2016 versus a range from 13,000 to 51,000  $\mu\text{g}/\text{L}$  since 1998. A review of the analytical data suggests that no wells in the monitoring program exhibit increasing trends over time. The historical data generally showed a steady-state groundwater plume with moderate concentration changes in upgradient (source area) locations.

### EVIDENCE OF ATTENUATION

PCE and trichloroethene (TCE) concentrations in groundwater samples demonstrated significant attenuation with distance downgradient. Along the western portion of the plume, PCE decreased from 20,000  $\mu\text{g}/\text{L}$  in source area well MW-6R to 1,100 and 1,200  $\mu\text{g}/\text{L}$  in downgradient wells MW-27S and MW-27D, respectively. Even stronger attenuation was observed along the eastern portion of the plume where PCE decreased from 53,000  $\mu\text{g}/\text{L}$  in well MW-16 to 80 and 390  $\mu\text{g}/\text{L}$  in downgradient wells MW-29S and MW-29D, respectively. Those data suggest that attenuation of constituents of potential concern (COPC) is occurring within groundwater as it migrates downgradient of the source.

### SURFACE WATER MONITORING ACTIVITIES AND RESULTS

Antea collected surface water samples from the unnamed stream on March 10, 2016 and September 29, 2016 for laboratory analysis of VOCs by USEPA Method 8260B. The unnamed stream originates approximately 1,200 feet southeast of the Facility, flows south to southwest, and eventually merges with South Buffalo Creek approximately 4,000 feet south of the Facility. Surface water sample locations are shown on **Figure 2**. Analytical results from the March and September 2016 surface water sampling events are provided in **Table 3** and the laboratory data reports, including chain-of-custody documentation, are provided in **Attachment 4**. Historical surface water results are summarized in **Table 4**.

Surface water sample results indicated that several target constituents, including PCE; TCE; cis-1,2-dichloroethene; and 1,1-dichloroethene were detected in most of the surface water samples collected in March and September 2016. Most of the constituents were detected at concentrations less than the Arcadis-derived health-based goals (HBGs) (Arcadis 2013). Consistent with the prior sampling events, PCE was detected at surface water sample locations SW-5 and SW-6 at concentrations greater than the HBGs for an adult wader. Because these constituents occur at their highest concentrations at or downgrading of surface water sample locations SW-5, their existence is at least partially attributable to

other industrial sources with documented soil and groundwater impacts located west of Ashland's former facility (Arcadis 2013).

## **CONCLUSIONS**

Based on the result of the groundwater and surface water sampling events discussed herein, the extent of COPCs originating from the Facility appear to be well defined by the existing monitoring well network. Also, attenuation of the COPCs continues to occur over the migration pathway from the Facility to the Unnamed Stream. Although periodic concentration fluctuations have been observed over time, the COPC plume appears to have generally reached steady-state conditions and is not increasing in size or concentration. These results are consistent with the conclusions of the RCRA Facility Investigation (Arcadis 2013).

An evaluation of groundwater conditions and recommendation for final corrective measures for groundwater was presented within the CMS submitted to NCDEQ in October 2014 (Arcadis 2014). Recommendations for final corrective measures for groundwater were soil source area treatment in conjunction with monitored natural attenuation. Arcadis designed the final corrective measures in 2015 and submitted the Corrective Measures Implementation Work Plan to the NCDEQ on February 4, 2016 (Arcadis 2016).

Mr. Michael Babuin  
February 7, 2017

## CLOSING STATEMENT

By providing my signature below, I certify that, to the best of my knowledge and after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete. Please let me know if you request any clarification of the information provided. Should you have any questions or require additional information, please contact Ryan Gerber at 919-415-2265.

Sincerely,

Arcadis G&M of North Carolina, Inc.



Ryan M. Gerber  
Senior Project Engineer

Copies:

Michael Dever - Ashland

Enclosures:

### Tables

- 1 Summary of Groundwater Elevation Measurements, September 19, 2016
- 2 Summary of Groundwater Analytical Results, September 2016
- 3 Summary of Surface Water Analytical Results, March and September 2016
- 4 Historical Surface Water Analytical Results at Primary Sample Locations

### Figures

- 1 Site Layout
- 2 Regional Site Layout
- 3 Shallow Aquifer Groundwater Elevations Measured September 19, 2016

### Attachments

- 1 Field Sampling Logs
- 2 Investigation-Derived Waste Disposal Manifest
- 3 Summary of Historical Groundwater Analytical Results
- 4 Analytical Laboratory Data Reports

### References

Arcadis 2013. Comprehensive RCRA Facility Investigation Report – Phase III. Former Ashland Distribution Facility, Greensboro, North Carolina. September.

Arcadis 2014. Corrective Measures Study. Former Ashland Inc. Facility, Greensboro, North Carolina. October 3.

Arcadis 2016. Corrective Measures Implementation Work Plan for In Situ Solidification. Former Ashland Inc. Facility, Greensboro, North Carolina. February 4.

## Tables

Table 1  
 Summary of Groundwater Elevation Measurements, September 19, 2016  
 Former Ashland Facility, Greensboro, North Carolina

Location	Screen Interval (ft bls)	Total Depth (ft bls)	TOC Elevation (ft msl)	Depth to Groundwater (ft)	Groundwater Elevation (ft msl)
MW-1	20.0	30.0	858.12	18.16	839.96
MW-1D	49.9	59.9	859.12	19.58	839.54
MW-2	16.0	26.0	855.30	17.61	837.69
MW-2D	49.0	59.0	855.55	16.35	839.20
MW-2BR	130.0	140.0	855.30	16.65	838.65
MW-3	15.5	25.5	856.06	11.51	844.55
MW-5R	5.1	20.1	857.03	NM	NM
MW-6R	5.5	20.5	856.96	10.47	846.49
MW-7S	12.5	22.5	855.92	10.10	845.82
MW-7M	38.6	48.6	855.99	10.74	845.25
MW-7D	50.9	60.9	855.95	10.78	845.17
MW-7BR	82.5	100.0	855.78	NM	NM
MW-8	11.3	21.3	853.76	15.71	838.05
MW-8D	49.6	59.6	853.76	15.73	838.03
MW-9	13.6	23.6	853.55	13.70	839.85
MW-10	5.6	15.6	856.39	NM	NM
MW-11	12.1	22.1	853.22	16.59	836.63
MW-11D	90.0	100.0	852.46	15.81	836.65
MW-11BR	146.5	156.5	851.49	15.71	835.78
MW-12	11.7	21.7	850.27	13.76	836.51
MW-12D	49.0	59.0	850.26	13.85	836.41
MW-13	11.5	21.5	863.66	20.03	843.63
MW-14	12.1	22.2	866.39	16.81	849.58
MW-14D	41.6	51.6	867.38	14.05	853.33
MW-15	12.6	22.6	866.62	17.27	849.35
MW-16	10.2	20.3	854.59	12.04	842.55
MW-17D	49.2	59.2	844.88	16.07	828.81
MW-18	82.8	92.8	867.39	14.70	852.69
MW-19	85.2	95.2	855.80	16.60	839.20
MW-20	85.0	95.0	855.64	16.31	839.33
MW-21	140.0	150.0	857.18	17.32	839.86
MW-22	76.0	86.0	845.52	26.75	818.77
MW-22BR	130.0	140.0	845.69	30.24	815.45
MW-23S	5.5	20.5	845.27	14.21	831.06
MW-23D	65.2	75.2	845.04	14.56	830.48
MW-24S	10.9	24.9	858.86	13.60	845.26
MW-24D	55.9	65.9	859.19	14.23	844.96
MW-25S	5.2	20.2	851.11	9.55	841.56
MW-25D	39.2	49.2	851.16	9.30	841.86
MW-26S	5.2	15.2	850.87	10.75	840.12
MW-26D	20.4	30.4	851.48	11.22	840.26
MW-27S	7.9	22.9	833.05	10.46	822.59
MW-27D	56.1	66.1	833.39	10.55	822.84
MW-28S	9.4	24.4	824.35	13.56	810.79
MW-28D	38.4	48.4	824.18	13.57	810.61
MW-29S	3.2	8.2	811.08	6.67	804.41
MW-29D	10.5	20.5	811.19	6.50	804.69
MW-29BR	80.0	90.0	811.42	8.25	803.17
MW-30S	6.1	16.1	807.54	8.23	799.31
MW-31S	20.0	30.0	865.96	7.25	858.71
MW-31D	43.0	53.0	865.92	15.58	850.34

Notes:

ft	Feet
ft bls	Feet below land surface.
TOC	Top of casing
ft msl	Feet above mean sea level.
NA	Not available.

**Table 2**  
**Summary of Groundwater Analytical Results - September 2016**  
**Former Ashland Facility, Greensboro, North Carolina**

Sample Location:	MW-3	MW-6R	MW-7S	MW-7M	MW-7D	MW-7BR
Lab Sample ID:	680-130081-1	680-130081-2	680-130081-3	680-130081-4	680-130081-5	680-130081-6
Date Sampled:	9/20/2016	9/20/2016	9/20/2016	9/20/2016	9/20/2016	9/20/2016
<b>Field Parameters</b>	<b>2L Groundwater Standard<sup>a</sup></b>					
Temperature (°C)	NE	23.0	22.4	23.0	23.1	23.6
pH (standard units)	6.5 - 8.5	<b>4.3</b>	<b>5.3</b>	<b>4.9</b>	<b>6.4</b>	<b>5.4</b>
Dissolved Oxygen (mg/L)	NE	1.3	0.5	4.8	0.8	0.9
Specific Conductance (µS/cm)	NE	716	291	238	271	106
Oxidation-Reduction Potential (mV)	NE	211	82	191	108	149
-	-	-	-	-	-	-
<b>VOCs (USEPA Method 8260B) µg/L</b>						
Acetone	6,000	<2500	<5000	<10	<200	<500
Benzene	1	<250	<500	<1.0	<20	<50
Carbon tetrachloride	0.3	<250	<500	<1.0	<20	<50
Chloroform	70	<250	<500	<1.0	<b>93</b>	<50
1,2-Dichlorobenzene	20	<250	<b>2,300</b>	<1.0	<b>190</b>	<b>60</b>
1,4-Dichlorobenzene	6	<250	<500	<1.0	<b>20</b>	<50
1,1-Dichloroethane	6	<b>390</b>	<500	<1.0	<b>440</b>	<b>76</b>
1,2-Dichloroethane	0.4	<250	<500	<1.0	<20	<50
1,1-Dichloroethene	350	<b>1,800</b>	<500	<1.0	<b>1,100</b>	<b>330</b>
cis-1,2-Dichloroethene	70	<b>6,700</b>	<b>7,400</b>	<1.0	<b>580</b>	<b>170</b>
1,2-Dichloropropane	0.6	<250	<500	<1.0	<20	<50
Ethylbenzene	600	<250	<500	<1.0	<20	<50
Methylene chloride	5	<1,300	<2,500	<1.0	<100	<250
Tetrachloroethylene	0.7	<b>15,000</b>	<b>20,000</b>	<b>1.7</b>	<b>5,500</b>	<b>3,000</b>
Toluene	600	<250	<b>4,000</b>	<1.0	<20	<50
1,1,1-Trichloroethane	200	<250	<b>3,600</b>	<1.0	<b>420</b>	<50
Trichloroethylene	3	<b>6,100</b>	<b>880</b>	<1.0	<b>540</b>	<b>400</b>
Vinyl chloride	0.03	<250	<500	<1.0	<20	<50
Xylenes, total	500	<250	<b>2,600</b>	<1.0	<b>490</b>	<b>73</b>
-	-	-	-	-	-	-
<b>SVOCs (USEPA Method 8270D) µg/L</b>						
1,2-Dichlorobenzene	20	NA	<b>880 J</b>	<0.19	NA	<b>47</b>
1,3-Dichlorobenzene	200	NA	<49 R	<0.19	NA	<b>1.1</b>
1,4-Dichlorobenzene	6	NA	<b>98 J</b>	<0.19	NA	<b>4.4</b>
1,4-Dioxane	3	NA	<2.0	<1.9	NA	<b>15</b>
Di-n-butyl phthalate	700	NA	<b>8.5 J</b>	<0.96	NA	<0.96
2-Methylnaphthalene	30	NA	<b>2.1 J</b>	<0.19	NA	<b>2.8</b>
3&4 Methylphenol	40 <sup>c</sup>	NA	<b>4.7 J</b>	<1.9	NA	<1.9
Naphthalene	6	NA	<b>14 J</b>	<0.19	NA	<b>6.9</b>
Phenol	30	NA	<b>1.4</b>	<0.96	NA	<0.96
1,2,4-Trichlorobenzene	70	NA	<b>210 J</b>	<0.96	NA	<b>34</b>

Notes:

a Title 15A North Carolina Administrative Code (NCAC) Subchapter 2L Groundwater Quality Standards

b Field duplicate sample associated with MW-16.

< Constituent was not detected above the laboratory reporting limit

°C Degrees celsius.

J Compound concentration is qualified as estimated.

R Non-detected data was rejected due to poor recovery of matrix spike

mg/L Milligrams per liter.

mV Millivolts.

NA Not analyzed.

NE Water quality criteria not established.

µg/L Micrograms per liter.

µS/cm Microsiemens per centimeter.

**Bold** Constituent was detected above the laboratory reporting limit

[64] Value exceeds the NCAC 2L Standard.

Values in brackets are duplicate sample results

**Table 2**  
**Summary of Groundwater Analytical Results - September 2016**  
**Former Ashland Facility, Greensboro, North Carolina**

Sample Location:	MW-11	MW-12	MW-12D	MW-16	MW-17D	MW-19
Lab Sample ID:	680-130081-7	680-130081-8	680-130081-9	680-130081-10	680-130081-11	680-130081-12
Date Sampled:	9/19/2016	9/20/2016	9/20/2016	9/20/2016	9/19/2016	9/20/2016
<b>Field Parameters</b>	<b>2L Groundwater Standard<sup>a</sup></b>					
Temperature (°C)	NE	20.3	22.8	21.4	23.0	22.4
pH (standard units)	6.5 - 8.5	<b>4.1</b>	<b>5.3</b>	<b>6.3</b>	<b>4.5</b>	<b>5.7</b>
Dissolved Oxygen (mg/L)	NE	2.6	4.4	3.7	2.3	1.3
Specific Conductance (µS/cm)	NE	400	55	183	114	160
Oxidation-Reduction Potential (mV)	NE	567	268	198	243	223
						57
<b>VOCs (USEPA Method 8260B) µg/L</b>						
Acetone	6,000	<2000	<10	<500 [<500]	<10,000 [<5,000]	<250
Benzene	1	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Carbon tetrachloride	0.3	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Chloroform	70	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
1,2-Dichlorobenzene	20	<200	<1.0	<b>1.5</b>	<1,000 [<500]	<25
1,4-Dichlorobenzene	6	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
1,1-Dichloroethane	6	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
1,2-Dichloroethane	0.4	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
1,1-Dichloroethene	350	<1.0	<b>280 [250]</b>	<1,000 [<500]	<b>100</b>	<b>780</b>
cis-1,2-Dichloroethene	70	<1.0	<b>350 [340]</b>	<1,000 [<500]	<b>270</b>	<b>2,300</b>
1,2-Dichloropropane	0.6	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Ethylbenzene	600	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Methylene chloride	5	<1000	<5.0	<250 [<250]	<5,000 [<2,500]	<130
Tetrachloroethylene	0.7	<b>5,700</b>	<b>9.3</b>	<b>880 [850]</b>	<b>53,000 [51,000]</b>	<b>3,000</b>
Toluene	600	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
1,1,1-Trichloroethane	200	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Trichloroethylene	3	<b>12,000</b>	<b>21</b>	<b>5,100 [4,500]</b>	<1,000 [<500]	<b>1,400</b>
Vinyl chloride	0.03	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
Xylenes, total	500	<200	<1.0	<50 [<50]	<1,000 [<500]	<25
<b>SVOCs (USEPA Method 8270D) µg/L</b>						
1,2-Dichlorobenzene	20	<b>2.6</b>	NA	<b>1.5 [1.2]</b>	NA	NA
1,3-Dichlorobenzene	200	<0.96	NA	<0.96	NA	NA
1,4-Dichlorobenzene	6	<b>3.1</b>	NA	<0.96	NA	NA
1,4-Dioxane	3	<b>280</b>	NA	<b>530 [470]</b>	NA	NA
Di-n-butyl phthalate	700	<0.96	NA	<0.96	NA	NA
2-Methylnaphthalene	30	<0.96	NA	<0.96	NA	NA
3&4 Methylphenol	40 <sup>c</sup>	<1.9	NA	<1.9	NA	NA
Naphthalene	6	<0.96	NA	<0.96	NA	NA
Phenol	30	<0.96	NA	<0.96	NA	NA
1,2,4-Trichlorobenzene	70	<b>1.6</b>	NA	<0.96	NA	NA

Notes:

a Title 15A North Carolina Administrative Code (NCAC) Subchapter 2L Groundwater Quality Standards

b Field duplicate sample associated with MW-16.

< Constituent was not detected above the laboratory reporting limit

°C Degrees celsius.

J Compound concentration is qualified as estimated.

R Rejected due to poor recovery of matrix spike

mg/L Milligrams per liter.

mV Millivolts.

NA Not analyzed.

NE Water quality criteria not established.

µg/L Micrograms per liter.

µS/cm Microsiemens per centimeter.

**Bold** Constituent was not detected above the laboratory reporting limit

[Value] Value exceeds the NCAC 2L Standard.

[Value] Values in brackets are duplicate sample results

**Table 2**  
**Summary of Groundwater Analytical Results - September 2016**  
**Former Ashland Facility, Greensboro, North Carolina**

Sample Location:	MW-22	MW-22BR	MW-27S	MW-27D	MW-29S	MW-29D	MW-30	
Lab Sample ID:	680-130081-13	680-130081-14	680-130081-15	680-130081-16	680-130081-17	680-130081-18	680-130081-19	
Date Sampled:	9/20/2016	9/20/2016	9/20/2016	9/20/2016	9/20/2016	9/20/2016	9/20/2016	
<b>Field Parameters</b>	2L Groundwater Standard <sup>a</sup>							
Temperature (°C)	NE	20.4	22.5	22.4	22.6	27.1	24.3	25.6
pH (standard units)	6.5 - 8.5	6.0	10.9	6.0	6.8	5.7	5.7	5.7
Dissolved Oxygen (mg/L)	NE	0.0	0.0	2.5	0.1	0.0	0.0	0.0
Specific Conductance (µS/cm)	NE	189	1083	108	142	1030	166	362
Oxidation-Reduction Potential (mV)	NE	-15	-34	191	79	-1.8	185	130
<b>VOCs (USEPA Method 8260B) µg/L</b>								
Acetone	6,000	<100	<b>28</b>	<100	<200	<10	<50	<25
Benzene	1	<10	<20	<10	<20	<1.0	<5.0	<1.0
Carbon tetrachloride	0.3	<10	<20	<10	<20	<1.0	<5.0	<1.0
Chloroform	70	<10	<20	<10	<20	<1.0	<5.0	<1.0
1,2-Dichlorobenzene	20	<10	<20	<10	<20	<1.0	<5.0	<1.0
1,4-Dichlorobenzene	6	<10	<20	<10	<20	<1.0	<5.0	<1.0
1,1-Dichloroethane	6	<b>13</b>	<b>9.4</b>	<10	<20	<b>1.8</b>	<b>8.0</b>	<1.0
1,2-Dichloroethane	0.4	<10	<20	<10	<20	<1.0	<5.0	<1.0
1,1-Dichloroethene	350	<b>200</b>	<b>130</b>	<b>76</b>	<b>130</b>	<b>8.1</b>	<b>39</b>	<1.0
cis-1,2-Dichloroethene	70	<b>490</b>	<b>57</b>	<b>71</b>	<b>250</b>	<b>17</b>	<b>81</b>	<1.0
1,2-Dichloropropane	0.6	<10	<20	<10	<20	<1.0	<5.0	<1.0
Ethylbenzene	600	<10	<20	<10	<20	<1.0	<5.0	<1.0
Methylene chloride	5	<50	<100	<50	<20	<5.0	<25	<5.0
Tetrachloroethylene	0.7	<b>1,200</b>	<b>370</b>	<b>1,100</b>	<b>1,200</b>	<b>80</b>	<b>390</b>	<b>11</b>
Toluene	600	<10	<20	<10	<20	<1.0	<5.0	<1.0
1,1,1-Trichloroethane	200	<10	<20	<10	<20	<1.0	<5.0	<1.0
Trichloroethylene	3	<b>560</b>	<b>260</b>	<b>540</b>	<b>860</b>	<b>32</b>	<b>160</b>	<b>5.3</b>
Vinyl chloride	0.03	<10	<20	<10	<20	<1.0	<5.0	<1.0
Xylenes, total	500	<10	<20	<10	<20	<1.0	<5.0	<2.0
<b>SVOCs (USEPA Method 8270D) µg/L</b>								
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	200	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	700	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	30	NA	NA	NA	NA	NA	NA	NA
3&4 Methylphenol	40 <sup>c</sup>	NA	NA	NA	NA	NA	NA	NA
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA
Phenol	30	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	NA	NA	NA

Notes:

a Title 15A North Carolina Administrative Code (NCAC) Subchapter 2L Groundwater Quality Standards

b Field duplicate sample associated with MW-16.

< Constituent was not detected above the laboratory reporting limit

°C Degrees celsius.

J Compound concentration is qualified as estimated.

R rejected due to poor recovery of matrix spike

mg/L Milligrams per liter.

mV Millivolts.

NA Not analyzed.

NE Water quality criteria not established.

µg/L Micrograms per liter.

µS/cm Microsiemens per centimeter.

**Bold** Constituent was not detected above the laboratory reporting limit.

Value exceeds the NCAC 2L Standard.

Values in brackets are duplicate sample results

[64]

Table 3

Summary of Surface Water Analytical Results - March and September 2016  
Former Ashland Facility, Greensboro, North Carolina

Sample Location: Lab Sample ID: Date Sampled:	HBG - Adult Wader <sup>a</sup>	HBG - Child Wader <sup>b</sup>	HBG - Fish Ingestion <sup>c</sup>	SW-3		SW-4		SW-5		SW-6	
	680-122921-1	0680-130081-25	680-122921-2	0680-130081-26	680-122921-3	0680-130081-27	680-122921-4	0680-130081-28	680-122921-4	0680-130081-28	680-122921-4
	3/10/2016	9/29/2016	3/10/2016	9/29/2016	3/10/2016	9/29/2016	3/10/2016	9/29/2016	3/10/2016	9/29/2016	3/10/2016
<u>VOCs (USEPA Method 8260B) µg/L</u>											
Acetone	-	-	10,900,000	<10	<10	<10	<10	<10	<10	<10	<10 [<10]
Benzene	-	-	19,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chloroform	-	-	-	<1.0	<b>1.0</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichlorobenzene	-	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1-Dichloroethane	-	-	112,000	<1.0	<1.0	<1.0	<1.0	1	<1.0	<b>1.8</b>	<1.0 [<1.0]
1,1-Dichloroethene	-	-	148,000	<b>6.1</b>	<b>2.5</b>	<b>7.7</b>	<b>2.5</b>	<b>10</b>	<b>7.1</b>	<b>43</b>	<b>11 [10]</b>
cis-1,2-Dichloroethene	-	-	6,900	<b>3.9</b>	<b>2.4</b>	<b>3.6</b>	<b>2.6</b>	<b>6.9</b>	<b>7.9</b>	<b>11</b>	<b>5.5 [5.5]</b>
Tetrachloroethene	19	140	160	<b>11</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>60</b>	<b>92</b>	<b>55</b>	<b>37 [34]</b>
Toluene	-	-	369,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,1-Trichloroethane	-	-	15,370,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>5.9</b>	<b>2.3 [2.2]</b>
1,1,2-Trichloroethane	-	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Trichloroethene	2,100	12,000	12,000	<b>6.7</b>	<b>4.4</b>	<b>6.6</b>	<b>4.9</b>	<b>24</b>	<b>33</b>	<b>31</b>	<b>15 [15]</b>
Vinyl chloride	-	-	1,140	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>1.4</b>	<1.0 [<1.0]
Xylenes (Total)	-	-	545,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]

Notes:

a Health-based goal for an adult wader scenario assuming an exposure frequency of 12 days per year and an exposure duration of 30 years (Arcadis 2010).

b Health-based goal for an child wader scenario assuming an exposure frequency of 12 days per year and an exposure duration of 6 years (Arcadis 2010).

c Health-based goal for fish ingestion assuming an average consumption of 0.63 grams per day and an exposure duration of 30 years (Arcadis 2010).

- Risk-based goal not assessed.

HBG Health-Based Goal

µg/L Micrograms per liter.

USEPA United States Environmental Protection Agency.

**Bold** Indicates constituents was detected at a concentration greater than the laboratory reporting limit.

[34] Value inside brackets indicates duplicate sample value

Value exceeds the HGB-Adult Wader goal.

## Reference

Arcadis. 2010. Surface Water and Near-Stream Groundwater Sampling Report, Former Ashland Distribution Company Facility, 2802 Patterson Street, Greensboro, North Carolina. July 19, 2010.

Table 4  
Historical Surface Water Analytical Results at Primary Sample Locations  
Former Ashland Facility, Greensboro, North Carolina

Target Constituent:		Acetone	Benzene	1,1-DCA	1,1-DCE	cis-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	Toluene	Xylenes (total)
HBG-Adult Wader <sup>a</sup> (µg/L)	NA	NA	NA	NA	NA	19	NA	2100	NA	NA	NA	NA
HBG-Child Wader <sup>b</sup> (µg/L)	NA	NA	NA	NA	NA	140	NA	12,000	NA	NA	NA	NA
HBG-Fish Ingestion <sup>c</sup> (µg/L)	10,900,000	19,000	112,000	148,000	6,900	160	15,370,000	12,000	1,140	369,000	545,000	
Sample ID	Date	Concentration (µg/L)										
SW-3	7/22/2009	<25	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
SW-3	6/15/2010	<25	<1.0	<1.0	<b>1.8</b>	<1.0	<b>1.4</b>	<1.0	<b>1.0</b>	<1.0	<1.0	<2.0
SW-3	12/17/2010	<b>57</b>	<1.0	<b>2.0</b>	<b>19</b>	<b>11</b>	<b>59</b>	<1.0	<b>20</b>	<1.0	<1.0	<2.0
SW-3	6/20/2011	<25	<1.0	<1.0	<b>11</b>	<b>7.7</b>	<b>110</b>	<1.0	<b>34</b>	<1.0	<1.0	<2.0
SW-3	12/12/2011	<25	<1.0	<1.0	<b>2.1</b>	<1.0	<b>1.3</b>	<1.0	<b>1.4</b>	<1.0	<1.0	<2.0
SW-3	3/22/2012	<25	<1.0	<1.0	<b>3.1</b>	<1.0	<b>1.7</b>	<1.0	<b>1.4</b>	<1.0	<1.0	<2.0
SW-3	4/30/2012	<25	<1.0	<1.0	<b>1.8</b>	<1.0	<b>1.1</b>	<1.0	<b>1.0</b>	<1.0	<1.0	<2.0
SW-3	10/31/2012	<25	<1.0	<1.0	<b>2.6</b>	<1.0	<b>1.2</b>	<1.0	<b>1.1</b>	<1.0	<1.0	<2.0
SW-3	12/12/2012	<25	<1.0	<1.0	<b>8.0</b>	<1.0	<b>3.4</b>	<1.0	<b>2.2</b>	<1.0	<1.0	<2.0
SW-3	3/7/2013	<25	<1.0	<1.0	<b>6.7</b>	<1.0	<b>3.0</b>	<1.0	<b>2.7</b>	<1.0	<1.0	<2.0
SW-3	6/24/2013	<25	<1.0	<1.0	<b>1.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
SW-3	9/19/2013	<25	<1.0	<1.0	<b>4.3</b>	<1.0	<b>2.8</b>	<1.0	<b>1.9</b>	<1.0	<b>1.3</b>	<2.0
SW-3	12/8/2013	<b>26</b>	<1.0	<1.0	<b>3.1</b>	<1.0	<b>1.6</b>	<1.0	<b>1.2</b>	<1.0	<1.0	<2.0
SW-3	3/20/2014	<25	<1.0	<1.0	<b>8.7</b>	<1.0	<b>4</b>	<1.0	<b>3.2</b>	<1.0	<1.0	<2.0
SW-3	6/18/2014	<25	<1.0	<1.0	<b>3.3</b>	<1.0	<b>1.9</b>	<1.0	<b>1.1</b>	<1.0	<b>2.1</b>	<2.0
SW-3	9/12/2014	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
SW-3	12/18/2014	<10	<1.0	<1.0	<b>2.5</b>	<1.0	<b>1.6</b>	<1.0	<b>1.1</b>	<1.0	<1.0	<2.0
SW-3	9/8/2015	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SW-3	12/10/2015	<10	<1.0	<1.0	<b>2.9</b>	<1.0	<b>9.2</b>	<1.0	<b>4.2</b>	<1.0	<1.0	<1.0
SW-4	7/22/2009	<25	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
SW-4	12/7/2009	<25	<1.0	<1.0	<b>2.0</b>	<b>1.4</b>	<b>8.2</b>	<1.0	<b>3.4</b>	<1.0	<1.0	<2.0
SW-4	12/22/2009	<25	<1.0	<1.0	<b>3.0</b>	<1.0	<b>4.1</b>	<1.0	<b>2.4</b>	<1.0	<1.0	<2.0
SW-4	3/25/2010	<b>930 J</b>	<1.0	<1.0	<b>7.0</b>	<b>7.4</b>	<b>7.9</b>	<1.0	<b>4.2</b>	<1.0	<1.0	<b>2.4</b>
SW-4	6/15/2010	<25	<1.0	<1.0	<b>2.0</b>	<b>1.6</b>	<b>4.3</b>	<1.0	<b>1.9</b>	<1.0	<1.0	<2.0
SW-4	12/17/2010	<b>56</b>	<1.0	<b>1.5</b>	<b>16</b>	<b>10</b>	<b>52</b>	<1.0	<b>19</b>	<1.0	<1.0	<2.0
SW-4	6/20/2011	<25	<1.0	<1.0	<b>10</b>	<b>6.9</b>	<b>110</b>	<1.0	<b>32</b>	<1.0	<1.0	<2.0
SW-4	12/12/2011	<25	<1.0	<1.0	<b>2.9</b>	<b>2.5</b>	<b>10</b>	<1.0	<b>5.1</b>	<1.0	<1.0	<2.0
SW-4	3/22/2012	<25	<1.0	<1.0	<b>3.4</b>	<b>2.6</b>	<b>9.5</b>	<1.0	<b>4.6</b>	<1.0	<1.0	<2.0
SW-4	4/30/2012	<25	<1.0	<1.0	<b>2.8</b>	<b>2.7</b>	<b>10</b>	<1.0	<b>4.6</b>	<1.0	<1.0	<2.0
SW-4	10/31/2012	<25	<1.0	<1.0	<b>3.1</b>	<b>2.9</b>	<b>10</b>	<1.0	<b>4.2</b>	<1.0	<1.0	<2.0
SW-4	12/12/2012	<25	<1.0	<1.0	<b>5.7</b>	<b>3.2</b>	<b>12</b>	<1.0	<b>4.9</b>	<1.0	<1.0	<2.0
SW-4	3/7/2013	<25	<1.0	<1.0	<b>6.5</b>	<b>2.8</b>	<b>12</b>	<1.0	<b>4.3</b>	<1.0	<1.0	<2.0
SW-4	6/24/2013	<25	<1.0	<1.0	<b>2.4</b>	<b>3.3</b>	<b>7.9</b>	<1.0	<b>3.3</b>	<1.0	<1.0	<2.0
SW-4	9/19/2013	<25	<1.0	<1.0	<b>6.9</b>	<b>2.7</b>	<b>11</b>	<1.0	<b>5.7</b>	<1.0	<b>1.5</b>	<2.0
SW-4	12/8/2013	<25	<1.0	<1.0	<b>3.4</b>	<b>3.3</b>	<b>6.8</b>	<1.0	<b>3.8</b>	<1.0	<1.0	<2.0
SW-4	3/20/2014	<25	<1.0	<1.0	<b>5.8</b>	<b>1.7</b>	<b>7.6</b>	<1.0	<b>4.2</b>	<1.0	<1.0	<2.0
SW-4	6/18/2014	<25	<1.0	<1.0	<b>4.1</b>	<b>3.4</b>	<b>10</b>	<1.0	<b>4.5</b>	<1.0	<b>3.7</b>	<2.0
SW-4	9/12/2014	<25	<1.0	<1.0	<b>2.6</b>	<b>2.2</b>	<b>8.8</b>	<1.0	<b>3.9</b>	<1.0	<1.0	<2.0
SW-4	12/18/2014	<10	<1.0	<1.0	<b>3.6</b>	<b>2.6</b>	<b>12</b>	<1.0	<b>4.7</b>	<1.0	<1.0	<2.0
SW-4	9/8/2015	<10	<1.0	<1.0	<b>1.9</b>	<b>3.1</b>	<b>9.4</b>	<1.0	<b>3.8</b>	<1.0	<1.0	<1.0
SW-4	12/10/2015	<10	<1.0	<1.0	<b>2.5</b>	<b>1.9</b>	<b>8.2</b>	<1.0	<b>3.7</b>	<1.0	<1.0	<1.0
SW-5	7/22/2009	<25	<1.0	<5.0	<5.0	<5.0	<b>29</b>	<5.0	<b>9.8</b>	<5.0	<5.0	<10
SW-5	8/13/2009	<25	<1.0	<5.0	<5.0	<5.0	<b>45</b>	<5.0	<b>15</b>	<5.0	<5.0	<10
SW-5	3/25/2010	<b>130</b>	<1.0	<b>1.6</b>	<b>13</b>	<b>17</b>	<b>37</b>	<1.0	<b>17</b>	<1.0	<1.0	<2.0
SW-5	6/15/2010	<b>88</b>	<1.0	<1.0	<b>6.9</b>	<b>6.2</b>	<b>44</b>	<1.0	<b>15</b>	<1.0	<1.0	<b>2.0</b>
SW-5	12/17/2010	<b>62</b>	<1.0	<b>1.1</b>	<b>14</b>	<b>9.3</b>	<b>57</b>	<1.0	<b>23</b>	<1.0	<1.0	<2.0
SW-5	6/20/2011	<25	<1.0	<1.0	<b>9.7</b>	<b>7.3</b>	<b>110</b>	<1.0	<b>32</b>	<1.0	<1.0	<2.0
SW-5	12/12/2011	<25	<1.0	<b>1.2</b>	<b>10</b>	<b>6.5</b>	<b>71</b>	<1.0	<b>27</b>	<1.0	<1.0	<2.0
SW-5	3/22/2012	<25	<1.0	<1.0	<b>7.1</b>	<b>5.6</b>	<b>46</b>	<1.0	<b>18</b>	<1.0	<1.0	<2.0
SW-5	4/30/2012	<25	<1.0	<1.0	<b>6.9</b>	<b>6.3</b>	<b>53</b>	<1.0	<b>20</b>	<1.0	<1.0	<2.0
SW-5	10/31/2012	<25	<1.0	<1.0	<b>9.8</b>	<b>7.1</b>	<b>85</b>	<1.0	<b>32</b>	<1.0	<1.0	<2.0
SW-5	12/12/2012	<25	<1.0	<b>1.0</b>	<b>11</b>	<b>13</b>	<b>85</b>	<1.0	<b>30</b>	<1.0	<1.0	<2.0
SW-5	3/7/2013	<25	<1.0	<b>1.2</b>	<b>11</b>	<b>9.0</b>	<b>58</b>	<1.0	<b>22</b>	<1.0	<1.0	<2.0
SW-5	6/24/2013	<25	<1.0	<1.0	<b>6.9</b>	<b>10</b>	<b>49</b>	<1.0	<b>19</b>	<b>1.3</b>	<1.0	<2.0
SW-5	9/19/2013	<25	<1.0	<1.0	<b>9.7</b>	<b>7.0</b>	<b>71</b>	<1.0	<b>33</b>	<1.0	<b>1.3</b>	<2.0
SW-5	12/8/2013	<b>27</b>	<1.0	<1.0	<b>9.1</b>	<b>13</b>	<b>69</b>	<1.0	<b>26</b>	<1.0	<1.0	<2.0
SW-5	3/20/2014	<25	<1.0	<b>1.1</b>	<b>9.9</b>	<b>6</b>	<b>47</b>	<1.0	<b>19</b>	<1.0	<1.0	<2.0
SW-5	6/18/2014	<25	<1.0	<b>1.1</b>	<b>11</b>	<b>12</b>	<b>81</b>	<1.0	<b>29</b>	<b>1.1</b>	<b>5.1</b>	<2.0
SW-5	9/12/2014	<25	<1.0	<1.0	<b>7.5</b>	<b>5.7</b>	<b>67</b>	<1.0	<b>27</b>	<1.0	<1.0	<2.0
SW-5	12/18/2014	<10	<1.0	<1.0	<b>10</b>	<b>8.6</b>	<b>86</b>	<1.0	<b>31</b>	<b>1.1</b>	<1.0	<2.0
SW-5	9/8/2015	<10	<1.0	<1.0	<b>4.2</b>	<b>5.8</b>	<b>52</b>	<1.0	<b>19</b>	<1.0	<1.0	<1.0
SW-5	12/10/2015	<10	<1.0	<b>1.1</b>	<b>7.9</b>	<b>7.6</b>	<b>60</b>	<1.0	<b>23</b>	<b>1.1</b>	<1.0	<1.0

See footnotes on the last page.

Table 4  
Historical Surface Water Analytical Results at Primary Sample Locations  
Former Ashland Facility, Greensboro, North Carolina

Target Constituent:		Acetone	Benzene	1,1-DCA	1,1-DCE	cis-1,2-DCE	PCE	1,1,1-TCA	TCE	Vinyl Chloride	Toluene	Xylenes (total)
HBG-Adult Wader <sup>a</sup> (µg/L)		NA	NA	NA	NA	NA	19	NA	2100	NA	NA	NA
HBG-Child Wader <sup>b</sup> (µg/L)		NA	NA	NA	NA	NA	140	NA	12,000	NA	NA	NA
HBG-Fish Ingestion <sup>c</sup> (µg/L)		10,900,000	19,000	112,000	148,000	6,900	160	15,370,000	12,000	1,140	369,000	545,000
Sample ID	Date	Concentration (µg/L)										
SW-6	8/13/2009	<25	<1.0	<5.0	7.1	<5.0	24	<5.0	9.7	<1.0	<5.0	<10
SW-6	6/15/2010	<25	<1.0	2.2	47	10	53	7.9	29	1.6	<1.0	<2.0
SW-6	12/17/2010	79	<1.0	2.0	19	10	51	<1.0	20	1.0	<1.0	<2.0
SW-6	6/20/2011	<25	<1.0	<1.0	8.5	6.2	100	<1.0	31	<1.0	<1.0	<2.0
SW-6	12/12/2011	<25	<1.0	1.5	9.9	4.1	37	4.6	24	<1.0	<1.0	<2.0
SW-6	4/30/2012	<25	<1.0	2.8	47	10	56	11	35	1.3	<1.0	<2.0
SW-6	10/31/2012	<25	<1.0	1.4	21	4.4	50	3.5	23	<1.0	<1.0	<2.0
SW-6	12/12/2012	<25	<1.0	1.9	30	10	57	5.4	30	<1.0	<1.0	<2.0
SW-6	6/24/2013	<25	<1.0	2.4	43	12	47	8.4	28	1.5	<1.0	<2.0
SW-6	9/19/2013	<25	<1.0	<1.0	16	4.7	33	3.3	21	<1.0	1.3	<2.0
SW-6	12/8/2013	<25	<1.0	2.6	46	11	77	9.9	41	<1.0	<1.0	<2.0
SW-6	3/20/2014	<25	1.0	2.7	38	8.6	59	9.3	36	<1.0	<1.0	<2.0
SW-6	6/18/2014	<25	<1.0	3.1	48	17	70	9.5	38	2.0	3.7	<2.0
SW-6	9/12/2014	<25	<1.0	1.1	20	7.2	30	3.3	17	<1.0	<1.0	<2.0
SW-6	12/18/2014	<10	<1.0	2.0	34	9.4	65	6.4	35	1.1	<1.0	<2.0
SW-6	9/8/2015	<10	<1.0	<1.0	2.9	3.2	17	<1.0	6.5	<1.0	<1.0	<1.0
SW-6	12/10/2015	<10	<1.0	1.1	18	6.1	42	3.4	21	<1.0	<1.0	<1.0
SW-7	8/13/2009	<25	<1.0	<5.0	<5.0	<5.0	8.9	<1.0	<5.0	<1.0	<5.0	<10
SW-7	6/15/2010	<25	<1.0	1.2	14	4.9	22	3.9	13	<1.0	<1.0	<2.0
SW-7	12/17/2010	70	<1.0	1.2	14	9.0	52	<1.0	20	<1.0	<1.0	<2.0
SW-SWAN-1	1/6/2011	<25	2.7	1.2	27	4.5	30	3.5	26	<1.0	5.0	3.7
SW-SWAN-1	12/12/2011	<25	<1.0	<1.0	9.9	3.3	15	2.5	15	<1.0	<1.0	<2.0
SW-SWAN-1	3/22/2012	<25	<1.0	<1.0	17	7.5	27	3.9	26	<1.0	<1.0	<2.0
SW-SWAN-1	4/30/2012	<25	<1.0	<1.0	14	5.3	18	3.6	15	<1.0	<1.0	<2.0
SW-SWAN-1	10/31/2012	<25	<1.0	<1.0	9.5	4.0	15	1.8	14	<1.0	<1.0	<2.0
SW-SWAN-1	12/12/2012	<25	<1.0	<1.0	7.0	3.7	14	1.2	11	<1.0	<1.0	<2.0
SW-SWAN-1	3/7/2013	<25	<1.0	<1.0	18	5.9	25	2.9	22	<1.0	1.1	<2.0
SW-SWAN-1	6/24/2013	<25	<1.0	<1.0	14	3.7	16	2.8	12	<1.0	<1.0	<2.0
SW-SWAN-1	9/19/2013	<25	<1.0	<1.0	10	2.6	15	3.0	12	<1.0	<1.0	<2.0
SW-SWAN-1	12/8/2013	<25	<1.0	<1.0	14	6.4	24	2.8	21	<1.0	<1.0	<2.0
SW-SWAN-1	3/20/2014	<25	2.0	<1.0	17	4.8	28	<1.0	25	<1.0	3.4	4.0
SW-SWAN-1	6/18/2014	<25	<1.0	<1.0	13	3.2	19	3.5	13	<1.0	<1.0	<2.0
SW-SWAN-1	9/12/2014	<25	<1.0	<1.0	8.3	2.9	8.6	1.5	7.7	<1.0	<1.0	<2.0
SW-SWAN-1	12/18/2014	<10	<1.0	<1.0	12	7.3	20	2.1	17	<1.0	<1.0	<2.0
SW-SWAN-1	9/8/2015	<10	<1.0	<1.0	4.3	2.6	7.3	<1.0	5.9	<1.0	<1.0	<1.0
SW-SWAN-1	12/10/2015	<10	<1.0	<1.0	13	8.3	19	2.4	17	<1.0	<1.0	<1.0

Notes:

- a Health-based goal for an adult wader scenario assuming an exposure frequency of 12 days per year and exposure duration of 30 years (Arcadis 2010).
- b Health-based goal for child wader scenario assuming an exposure frequency of 12 days per year and an exposure duration of 6 years (Arcadis 2010).
- c Health-based goal for fish ingestion assuming an average daily consumption of 0.63 grams per day and an exposure duration of 30 years (Arcadis 2010).

1,1-DCA 1,1-Dichloroethane.

1,1-DCE 1,1-Dichloroethene.

cis-1,2-DCE cis-1,2-Dichloroethene.

HBG Health-based goal.

J Constituent concentration is qualified as estimated.

NA Risk-based goal not assessed.

PCE Tetrachloroethene.

TCE Trichloroethene.

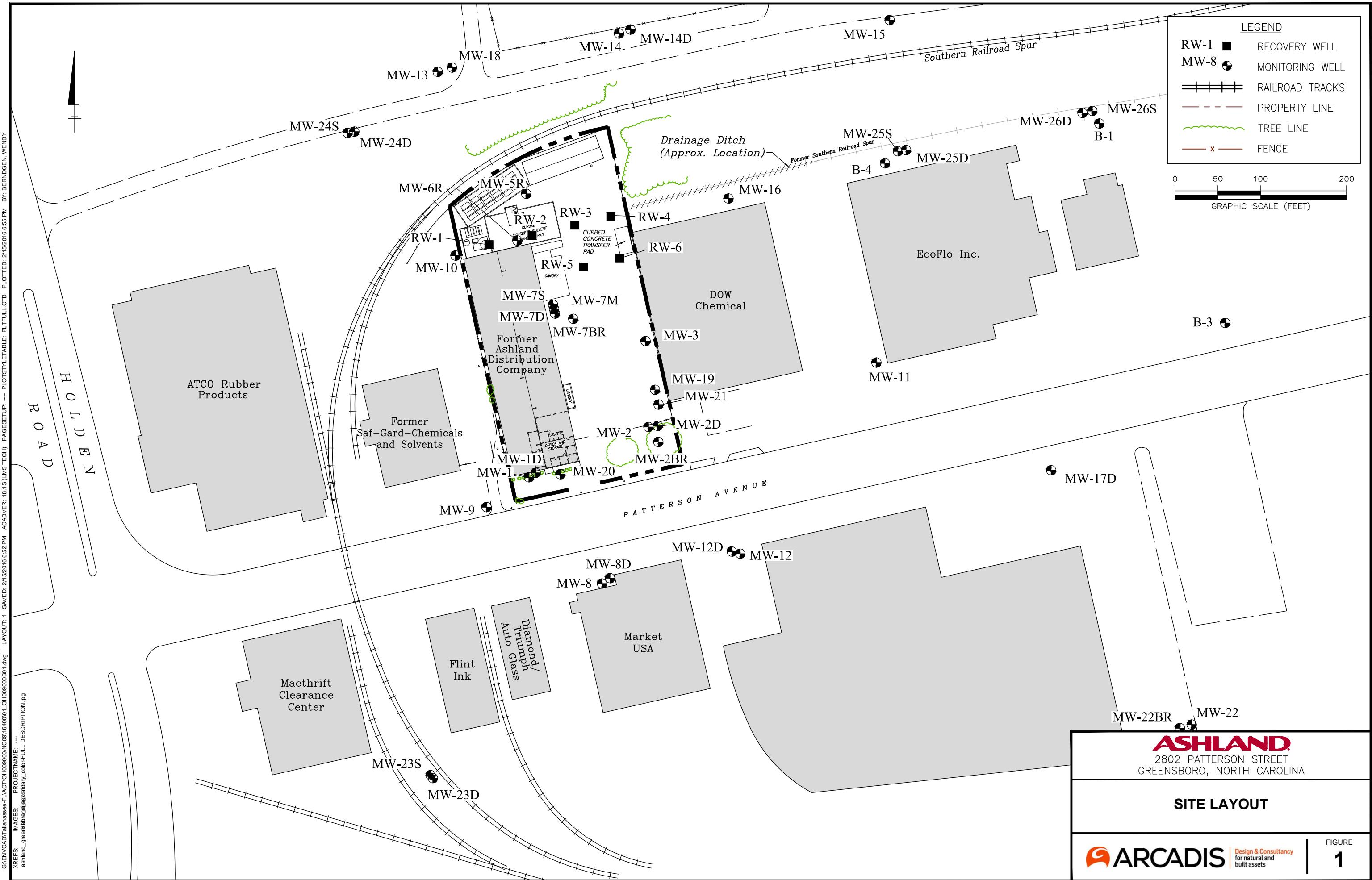
µg/L Micrograms per liter.

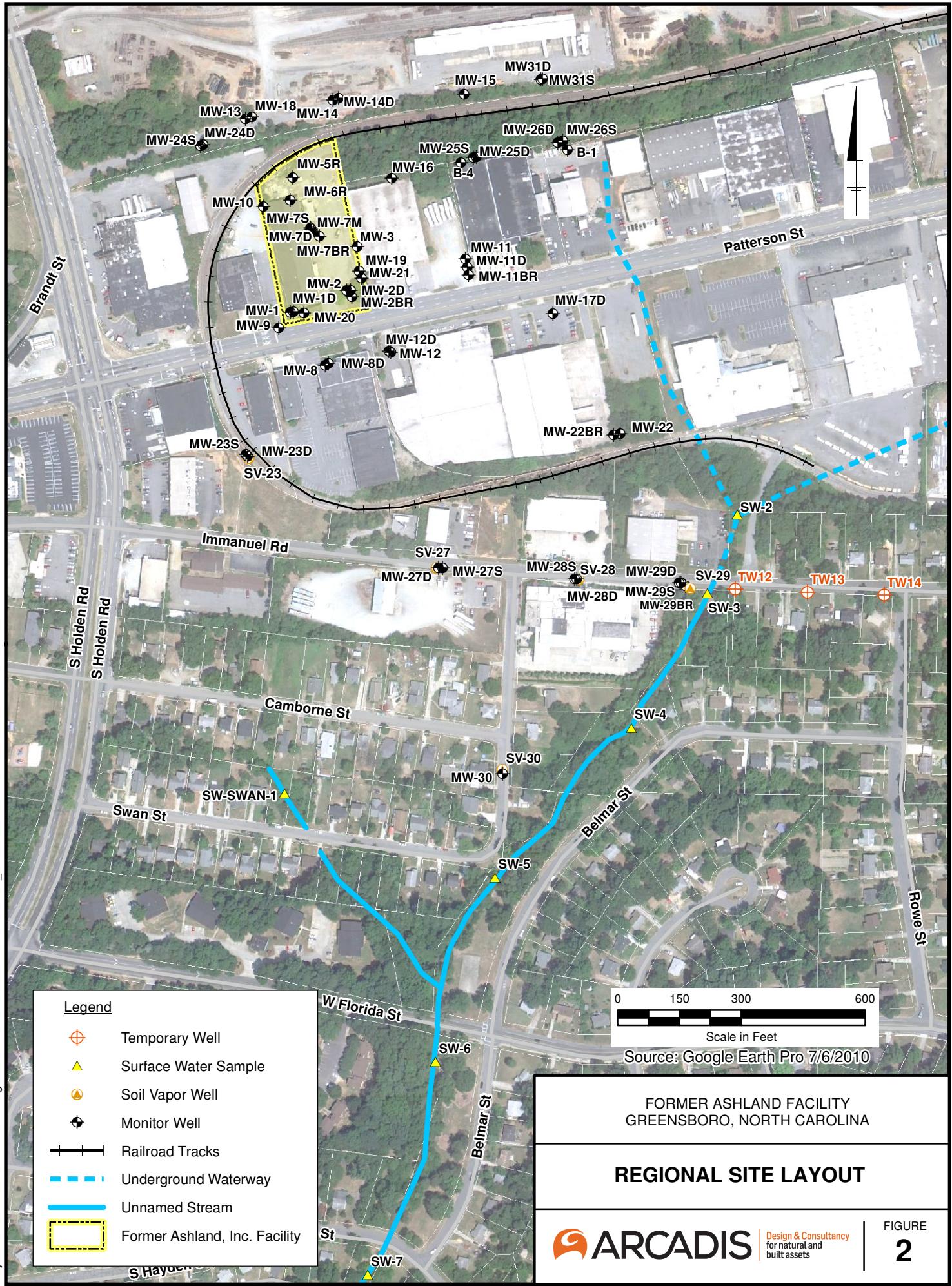
| Value exceeds the HBG-Adult Wader goal.

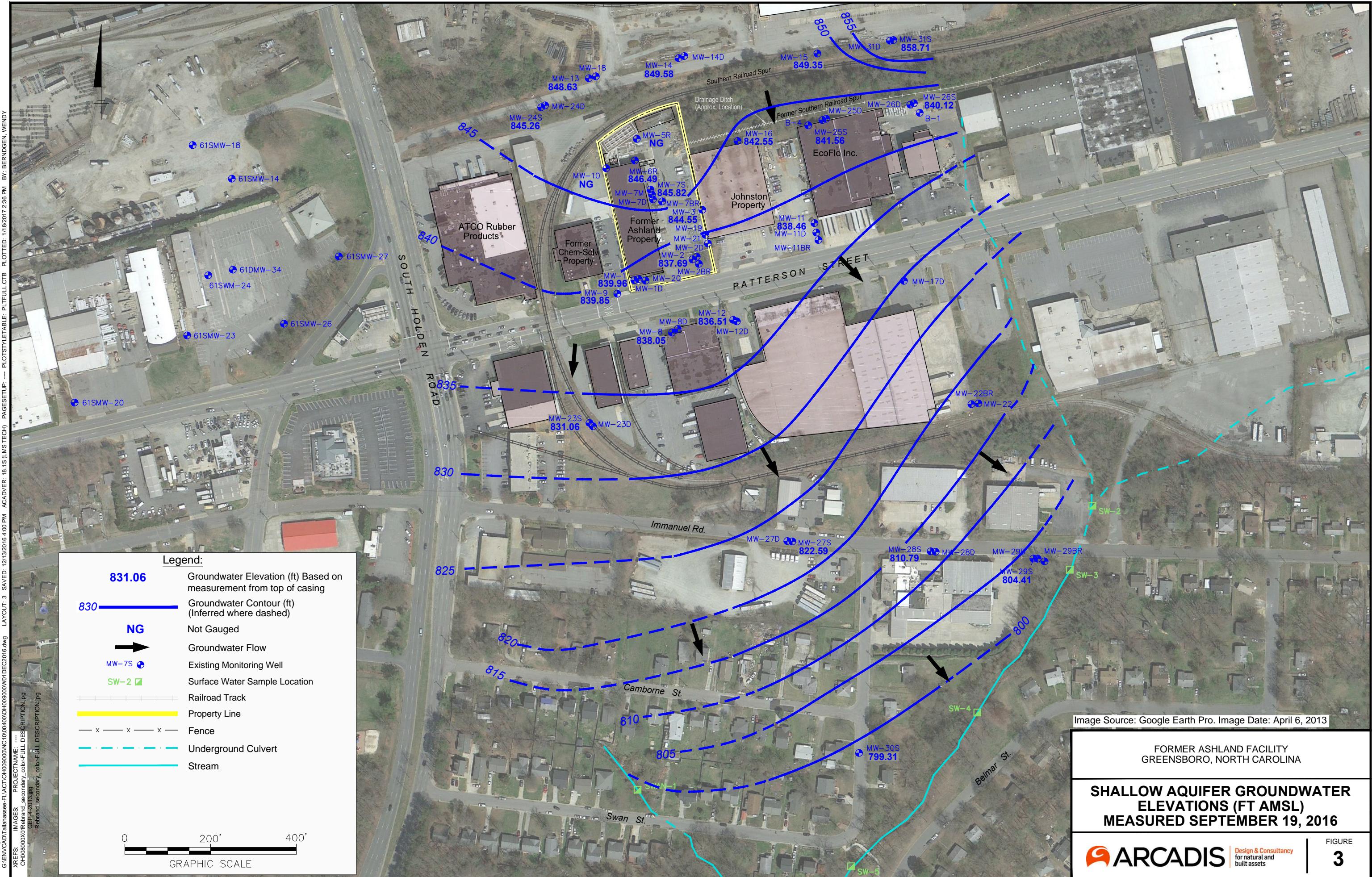
Reference

Arcadis. 2010. Surface Water and Near-Stream Groundwater Sampling Report, Former Ashland Distribution Facility, Greensboro, North Carolina. July 19, 2010.

## Figures







**Attachment 1****Field Sampling Logs**

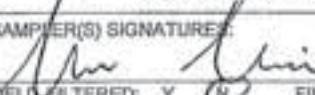
# GROUNDWATER SAMPLING LOG

SITE NAME: ASHLAND - GREENSBORO	SITE LOCATION: GREENSBORO, NC
WELL ID: MW-3	DATE: 9/20/16

## PURGING DATA

WELL DIAMETER (inches)	WELL SCREEN INTERVAL DEPTH:			STATIC DEPTH TO WATER (feet)	PURGE PUMP TYPE OR BAILER:					
	feet to	feet	feet		Peristaltic /	Stainless Submersible	BLADDER	TUBING LENGTH) + FLOW CELL VOLUME		
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X (TUBING LENGTH) + FLOW CELL VOLUME)</b>										
(only fill out if applicable)	=	0.2	liters + ( 0.0024 liters/foot X 25 feet ) =	0.2	liters =	0.46	liters			
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (Liters/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
1034	0.0	0.0	0.2	13.20	4.61	22.86	711	4.50	8.0	187
1037	0.4	0.4		13.20	4.38	22.97	712	3.02	6.3	208
1040	0.6	1.2		13.18	4.35	22.98	712	1.58	6.2	212
1043	0.6	1.8		13.15	4.34	22.96	715	1.31	5.8	212
1046	0.4	2.4		13.15	4.33	22.97	716	1.31	5.8	212
1049	0.0	3.0		13.15	4.31	22.98	716	1.28	5.3	211
TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0386; 5/8" = 0.0603										

## SAMPLING DATA

SAMPLED BY (PRINT / AFFILIATION): M ECKMAIR / ANTEA GROUP	SAMPLER(S) SIGNATURE: 	SAMPLING TIME: 1050	
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>	FIELD FILTERED: Y <input type="checkbox"/> N Filtration Equipment Type:	FILTER SIZE: _____ µm	DUPPLICATE: Y <input type="checkbox"/>
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	40mL	HCl	8260
REMARKS:			

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

No BLADDER PUMP → WDM

Specific Conductance: 10%

CONNECTOR → TUBING

Drawdown: <0.5 ft from Initial

CABLE

Dissolved Oxygen: <0.5 mg/L

TUBING

# GROUNDWATER SAMPLING LOG

SITE NAME: ASHLAND - GREENSBORO	SITE LOCATION: GREENSBORO, NC	DATE: 9/20/16
WELL ID: MN-VR		

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet in	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:							
2.00		10.47	Peristaltic / Stainless Submersible BLADDER							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)										
$= 0.2 \text{ liters} + (0.0024 \text{ liters/foot} \times 20 \text{ feet}) + 0.2 \text{ liters} = 0.45 \text{ liters}$										
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (liters/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
13:18	0.0	0.0	0.2	10.58	5.34	22.56	311	1.43	72.5	166
13:21	0.6	0.6		10.54	5.31	22.29	300	0.69	61.5	131
13:24	0.6	1.2		10.54	5.32	22.27	303	0.64	39.7	111
13:27	0.6	1.8		10.53	5.32	22.35	300	0.61	29.2	100
13:30	0.6	2.4		10.53	5.32	22.37	298	0.59	25.0	93
13:33	0.6	3.0		10.53	5.30	22.36	295	0.57	18.1	86
13:36	0.6	3.6		10.53	5.29	22.36	293	0.55	12.2	84
13:39	0.6	4.2	↓	10.53	5.27	22.35	291	0.54	9.1	82
TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0388; 5/8" = 0.0603										

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: M. ECKMAIR / ANTEA GROUP	SAMPLER(S) SIGNATURES: 	SAMPLING TIME: 1340
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> FILTER SIZE: _____ µm Filtration Equipment Type:	DUPPLICATE: Y <input checked="" type="checkbox"/>
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION
# CONTAINERS	VOLUME	PRESERVATIVE USED
3	40 mL	HCl
2	1 L	—
INTENDED ANALYSIS AND/OR METHOD		
8260		
8270		
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

- Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other
- Temp.: <0.5 Degrees C
- pH: <0.1 SU
- Specific Conductance: 10%
- Drawdown: <0.5 ft from initial
- Dissolved Oxygen: <0.5 mg/L

# GROUNDWATER SAMPLING LOG

SITE NAME: <u>Ashland-Greensboro</u>	SITE LOCATION: <u>Greensboro, NC</u>
WELL ID: <u>MW-7BR</u>	DATE: <u>9/20/16</u>

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:			STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:					
<u>2.0</u>	feet to	feet		<u>10.58</u>	Peristaltic / <u>Stainless Submersible</u>					
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)</b>										
	= <u>0.2</u>	liters + ( <u>0.0217</u> liters/foot X <u>95</u> feet) + <u>0.2</u> liters = <u>2.46</u> liters								
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTUs)	OXYGEN REDUCTION POTENTIAL (mV)
14:59	0.0	0.0	0.2	10.58	7.07	20.07	1610	0.0	21.2	-142.1
15:02	0.6	0.6	0.2	11.25	7.15	21.41	1655	0.0	14.8	-157.2
15:05	0.6	1.2	0.2	11.77	7.15	19.93	1668	0.0	17.6	-158.5
15:08	0.6	1.8	0.2	11.94	7.16	19.82	1659	0.0	21.0	-162.0
15:11	0.6	2.4	0.2	12.20	7.08	20.18	1656	0.0	24.3	-165.7
15:14	0.6	3.0	0.2	12.12	7.04	20.43	1641	0.0	36.0	-166.7
TUBING INSIDE DIA. CAPACITY (Liters/FT): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0386; 5/8" = 0.0603										

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>B. BIGGERS / ANTEA GROUP</u>	SAMPLER(S) SIGNATURES: <u>Brian Biggers</u>	SAMPLING TIME: <u>1520</u>
FIELD DECONTAMINATION: <input checked="" type="checkbox"/> <input type="checkbox"/>	FIELD-FILTERED: <input checked="" type="checkbox"/> <input type="checkbox"/> FILTER SIZE: _____ µm Filtration Equipment Type: _____	DUPPLICATE: <input checked="" type="checkbox"/> <input type="checkbox"/>
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION
# CONTAINERS	VOLUME	PRESERVATIVE USED
3	40 mL	HCl
		8260
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

Note: Strong odor, possibly chlorinated

Brian Biggers

## **GROUNDWATER SAMPLING LOG**

SITE NAME: ASHLAND-GREENSBORO	SITE LOCATION: GREENSBORO, NC
WELL ID: MW-7D	DATE: 9/20/10

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>MECKMAIR / ANTEA GROUP</b>		SAMPLER(S) SIGNATURES: <i>[Handwritten signatures]</i>	SAMPLING TIME: <b>1125</b>
FIELD DECONTAMINATION: <b>Y</b> <i>(initials)</i>		FIELD FILTERED: <b>Y</b> <i>(initials)</i> Filtration Equipment Type:	FILTER SIZE: _____ μm
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	20ML	HCl	8260
2	1L	-	8270
REMARKS:			

**NOTES:** 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity:	<10 NTU or 3 Consecutive readings within 10% of each other
Temp.:	<0.5 Degrees C
pH:	<0.1 SU
Specific Conductance:	10%
Drawdown:	<0.5 ft from Initial
Dissolved Oxygen:	<0.5 mg/L

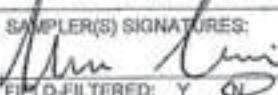
# GROUNDWATER SAMPLING LOG

SITE NAME: ASHLAND-GREENSBORO	SITE LOCATION: GREENSBORO, NC
WELL ID: MN-7M	DATE: 9/20/10

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:							
200		10.74	Peristaltic / Stainless Submersible BLADDER							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME										
(only fill out if applicable)										
	= 0.2 liters + (0.0024 liters/foot X 50 feet) + 0.2 liters = 0.52 liters									
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
1146	0.0	0.0	0.2	11.45	6.39	22.66	247	1.84	38.2	142
1149	0.6	0.6		11.31	6.41	22.68	266	0.97	22.9	126
1152	0.6	1.2		11.27	6.42	22.71	269	0.79	16.3	118
1155	0.6	1.8		11.30	6.41	23.00	275	0.81	13.1	112
1158	0.6	2.2		11.	6.41	23.05	271	0.80	9.3	108
TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0386; 5/8" = 0.0603										

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>M ECKMAIR / ANTEA GROUP</b>	SAMPLER(S) SIGNATURES: 	SAMPLING TIME: <b>1200</b>
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> FILTER SIZE: _____ µm Filtration Equipment Type:	DUPPLICATE: Y <input checked="" type="checkbox"/>
SAMPLE CONTAINER SPECIFICATION		INTENDED ANALYSIS AND/OR METHOD
# CONTAINERS	VOLUME	
3	40mL	HCl
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

## GROUNDWATER SAMPLING LOG

SITE NAME:	ASHLAND - GREENSBORO,	SITE LOCATION:	GREENSBORO, NC
WELL ID:	MN-75	DATE:	9/20/14

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>MECMAIR ANTEA GROUP</b>		SAMPLER(S) SIGNATURES <i>[Handwritten signatures]</i>	SAMPLING TIME: <b>1225</b>
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> Filtration Equipment Type:	FILTER SIZE: _____ μm
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	40mL	HCl	8260
2	1 L	—	8270
REMARKS:			

**NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH = 50.1 SU

Specific Conductance: 10%

Demand down: <0.5% from initial

Dissolved Oxygen: 6.0 mg/l

# GROUNDWATER SAMPLING LOG

SITE NAME: ASHLAND - GREENSBORO	SITE LOCATION: GREENSBORO, NC	DATE: 9/19/2010
WELL ID: MW-11		

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:							
2.00		16.59	Pistolbc / <u>Stainless Submersible</u> <u>BUDDER</u>							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)										
$= 0.2 \text{ liters} + (0.0024 \text{ liters/foot} \times 2.2 \text{ feet}) + 0.2 \text{ liters} = 0.45 \text{ liters}$										
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (liters/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
1719	0.45	0.45	0.45	16.77	4.15	22.28	402	3.30	73.0	3.23
1722	1.35	1.8	0.45	16.81	4.14	21.18	399	3.00	36.4	3.10
1725	1.35	3.15	0.45	16.85	4.09	20.40	401	2.74	21.8	56.83
1728	1.35	4.5	0.45	16.85	4.10	20.52	401	2.62	19.0	56.73
1731	1.35	5.85	0.45	16.85	4.09	20.70	399	2.66	8.7	56.62
1734	1.35	7.2	0.45	16.85	4.06	20.31	400	2.63	4.8	56.6.7
TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0388; 5/8" = 0.0603										

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>M.ECKMAIR / ANTEA GROUP</u>	SAMPLER(S) SIGNATURES: <u>John</u> <u>John</u>	SAMPLING TIME: 1735	
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>	FIELD-FILTERED: Y <input type="checkbox"/> N Filtration Equipment Type:	FILTER SIZE: _____ µm DUPLICATE: Y <input type="checkbox"/>	
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	
3	40mL	HCl	INTENDED ANALYSIS AND/OR METHOD
2	1L	—	8260
			8270
REMARKS:			

### NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

## GROUNDWATER SAMPLING LOG

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-12	DATE: 9/20/16

## PURGING DATA

#### SAMPLING DATA

**NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from initial

Dissolved Oxygen: >0.5 mg/l

## GROUNDWATER SAMPLING LOG

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-12D	DATE: 9/20/16

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>B.Biggers/Antea Group</b>		SAMPLER(S) SIGNATURES: <b>B. Bigger</b>	SAMPLING TIME: <b>0845</b>
FIELD DECONTAMINATION: <b>Y</b> <input checked="" type="radio"/>		FIELD-FILTERED: <b>N</b> <input type="radio"/> Filtration Equipment Type:	FILTER SIZE: _____ μm
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
<b>6</b>	<b>0.40 L</b>	<b>HCL</b>	<b>8260</b>
<b>4</b>	<b>1 L</b>	<b>None</b>	<b>8270</b>
REMARKS:			

**NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

- |                       |  |
|-----------------------|--|
| Turbidity:            | <10 NTU or 3 Consecutive readings within 10% of each other |
| Temp.:                | <0.5 Degrees C   |
| pH:                   | <0.1 SU  |
| Specific Conductance: | 10%  |
| Drawdown:             | <0.5 ft from Initial                                       |
| Dissolved Oxygen:     | <0.5 mg/L  |

# GROUNDWATER SAMPLING LOG

SITE NAME:	ASHLAND - GREENSBORO	SITE LOCATION:	GREENSBORO, NC
WELL ID:	MN-10		DATE: 9/20/16

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2.00		12.24	Pedestal / Stainless Submersible BLADDER
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME * (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)			
$= 0.2 \text{ liters} + (0.0024 \text{ liters/foot} \times 22 \text{ feet}) + 0.2 \text{ liters} = 0.45 \text{ liters}$			
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (Liters/min)
1252	0.0	0.0	0.2
1255	0.6	0.6	
1258	0.6	1.2	
1301	0.6	1.8	
1304	0.4	2.4	

TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 5/16" = 0.0054; 1/4" = 0.0097; 5/8" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0386; 5/8" = 0.0603

## SAMPLING DATA

SAMPLED BY (PRINT)/AFFILIATION: <b>MECKLMAIR/ANTEA GROUP</b>	SAMPLER(S) SIGNATURE: <i>John Deni</i>	SAMPLING TIME: <b>1305</b>
FIELD DECONTAMINATION: <b>Y</b>	FIELD-FILTERED: <b>Y</b>	FILTER SIZE: _____ μm Filtration Equipment Type:
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION
# CONTAINERS	VOLUME	PRESERVATIVE USED
<b>36</b>	<b>40mL</b>	<b>HCl</b>
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

- Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other
- Temp.: <0.5 Degrees C
- pH: <0.1 SU
- Specific Conductance: 10%
- Drawdown: <0.5 ft from Initial
- Dissolved Oxygen: <0.5 mg/L

# GROUNDWATER SAMPLING LOG

SITE NAME: Well ID:	Ashland - Greensboro MW-17D	SITE LOCATION: Greensboro, NC	DATE: 9/20/16
------------------------	--------------------------------	----------------------------------	---------------

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:							
2.00										
		16.31	Peristaltic / Submersible Bladder							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)										
	= 0.2 liters + (0.0024 liters/foot X 59 feet) + 0.2 liters = 0.54 liters									
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (liters/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
759	0.2	0.20	0.20	16.31	6.01	23.07	161	3.74	28.3	177.1
802	0.6	0.80	0.20	16.35	5.75	22.54	162	2.32	30.0	201.6
805	0.6	1.40	0.20	16.37	5.70	22.33	161	1.77	20.9	211.7
807	0.6	2.00	0.20	16.37	5.69	22.27	161	1.44	17.6	217.0
810	0.6	2.60	0.2	16.37	5.68	22.38	160	1.28	9.3	223.1

TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0366; 5/8" = 0.0603

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>B. Biggers / Antea Group</i>	SAMPLER(S) SIGNATURES: <i>B. Biggers</i>	SAMPLING TIME: 815
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>	FIELD-FILTERED <input checked="" type="checkbox"/> N FILTER SIZE: _____ µm Filtration Equipment Type: _____	DUPPLICATE: Y <input checked="" type="checkbox"/>
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION
# CONTAINERS	VOLUME	PRESERVATIVE USED
3	0.40 L	HCL
INTENDED ANALYSIS AND/OR METHOD		
8260		
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

## GROUNDWATER SAMPLING LOG

SITE NAME:	ASHLAND- GREENSBORO	SITE LOCATION:	GREENSBORO, NC
WELL ID:	MW-19	DATE:	9/20/14

## PURGING DATA

## SAMPLING DATA

**NOTES:** 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Family:  $\leq 10$  NTU or 5 consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: < 4

conductance: 10%

Drawdown: <0.5 ft from

Dissolved Oxygen: <0.5 mg/L

NO BLADDER PUMP → WOM  
CONNECTOR TUBING

## GROUNDWATER SAMPLING LOG

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-22	DATE: 9/20/16

#### PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>B. BIGGERS</b> / Antea Group		SAMPLER(S) SIGNATURES: <i>B. Biggers</i>	SAMPLING TIME: 7:40	
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Filtration Equipment Type:	FILTER SIZE: _____ μm	
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD
# CONTAINERS	VOLUME	PRESERVATIVE USED		
3	40 mL	HCL		8260
REMARKS:				

**NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

- |                       |  |
|-----------------------|--|
| Turbidity:            | <10 NTU or 3 Consecutive readings within 10% of each other |
| Temp.:                | <0.5 Degrees C   |
| pH:                   | <0.1 SU  |
| Specific Conductance: | 10%  |
| Drawdown:             | <0.5 ft from Initial                                       |
| Dissolved Oxygen:     | <0.5 mg/L  |

# GROUNDWATER SAMPLING LOG

SITE NAME: ASHLAND - GREENSBORO	SITE LOCATION: GREENSBORO, NC
WELL ID: MN-22BR	DATE: 9/20/2010

## PURGING DATA

WELL DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:			STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:				
	2.00	feet to	feet	30.28	X	TUBING LENGTH) + FLOW CELL VOLUME	Stainless Submersible	BLADDER		
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b>										
(only fill out if applicable)										
				= 0.2 liters + (0.0024 liters/foot X 140 feet) + 0.2 liters = 0.76 liters						
TIME	VOLUME PURGED (liters)	CUMUL. VOLUME PURGED (liters)	PURGE RATE (liters/min)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISS. OXYGEN (mg/L)	TURBIDITY (NTU)	OXYGEN REDUCTION POTENTIAL (mV)
0655	0.75	0.75	0.75	30.28	6.80	22.47	965	1.91	0.0	224.0
0658	2.25	3.00		32.22	9.84	21.30	979	0.00	0.4	71.1
0701	2.25	5.25		32.22	10.59	21.18	1028	0.00	2.7	26.8
0704	2.25	7.50		32.22	10.89	21.75	1025	0.00	1.6	-12.3
0707	2.25	9.75		32.22	10.89	21.94	1042	0.00	5.2	-20.4
0710	2.25	12.00		32.22	10.89	22.19	1055	0.00	4.2	-26.2
0713	2.25	14.25		32.22	10.90	22.35	1071	0.00	2.1	-30.8
0716	2.25	16.50		32.22	10.93	22.52	1083	0.00	4.7	-34.1

TUBING INSIDE DIA. CAPACITY (Liters/ft): 1/8" = 0.0024; 3/16" = 0.0054; 1/4" = 0.0097; 5/16" = 0.0151; 3/8" = 0.0217; 1/2" = 0.0388; 5/8" = 0.0603

## SAMPLING DATA

SAMPLED BY (PRINT / AFFILIATION): <b>MECKLENBURG / ANTEA GROUP</b>	SAMPLER(S) SIGNATURES:	SAMPLING TIME: 0718
FIELD DECONTAMINATION: Y <input checked="" type="radio"/>	FIELD FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/> FILTER SIZE: _____ µm Filtration Equipment Type:	DUPPLICATE: Y <input checked="" type="radio"/>
SAMPLE CONTAINER SPECIFICATION		INTENDED ANALYSIS AND/OR METHOD
# CONTAINERS	VOLUME	
3	40 mL	HCl
REMARKS:		

NOTES: 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

WQM  
NO BLADDER PUMP → FOLLOW WITH  
CONNECTOR TUBING

VOL. PURGED:

## **GROUNDWATER SAMPLING LOG**

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-27D	DATE: 9/20/16

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>B. Biggers / Antec Group</u>		SAMPLER(S) SIGNATURES: <u>B. Biggers</u>	SAMPLING TIME: 11:30
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Filtration Equipment Type:	FILTER SIZE: _____ μm
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	40 mL	HCL	8260
REMARKS:			

**NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other  
 Temp.: <0.5 Degrees C  
 pH: <0.1 SU  
 Specific Conductance: 10‰  
 Drawdown: <0.5 ft from initial  
 Dissolved Oxygen: <0.5 mg/L

Note: Readings and samples taken at ~66 ft  
 - Hit bottom at ~66 ft  
 - Original Depth to bottom ~98 ft

## GROUNDWATER SAMPLING LOG

SITE NAME:	Ashland - Greensboro	SITE LOCATION:	Greensboro, NC
WELL ID:	MW-27S	DATE:	9/20/16

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>B.Biggers/Artec Group</u>		SAMPLER(S) SIGNATURES: <u>B. Biggers</u>	SAMPLING TIME: 10:40
FIELD DECONTAMINATION: Y <input checked="" type="radio"/> N		FIELD-FILTERED: Y <input checked="" type="radio"/> N Filtration Equipment Type:	FILTER SIZE: _____ μm
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	40 mL	HCL	8260
REMARKS:			

**NOTES- 4 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS**

- |                       |  |
|-----------------------|--|
| Turbidity:            | <10 NTU or 3 Consecutive readings within 10% of each other |
| Temp.:                | <0.5 Degrees C.  |
| pH:                   | <0.1 SU  |
| Specific Conductance: | 10%  |
| Drawdown:             | <0.5 ft from Initial                                       |
| Dissolved Oxygen:     | <0.5 mg/L  |

## GROUNDWATER SAMPLING LOG

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-29D	DATE: 9/20/16

## PURGING DATA

## SAMPLING DATA

**NOTES:** 1. STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/L

## GROUNDWATER SAMPLING LOG

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW - 29 S	DATE: 9/20/16

#### PURGING DATA

## SAMPLING DATA

## **NOTES:** 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from Initial

Dissolved Oxygen: <0.5 mg/l

## **GROUNDWATER SAMPLING LOG**

SITE NAME: Ashland - Greensboro	SITE LOCATION: Greensboro, NC
WELL ID: MW-30	DATE: 9/20/16

## PURGING DATA

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: B. Biggers/Antra Group		SAMPLER(S) SIGNATURES: <i>B. Biggers</i>	SAMPLING TIME: 14:20
FIELD DECONTAMINATION: Y <input checked="" type="radio"/>		FIELD-FILTERED: Y <input checked="" type="radio"/> FILTER SIZE: ____ μm Filtration Equipment Type:	DUPLICATE: Y <input checked="" type="radio"/>
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION	
# CONTAINERS	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD
3	40 mL	HCL	8260
REMARKS:			

**NOTES- 1 STABILIZATION CRITERIA FOR THREE CONSECUTIVE WATER QUALITY READINGS**

Turbidity: <10 NTU or 3 Consecutive readings within 10% of each other

Temp.: <0.5 Degrees C

pH: <0.1 SU

Specific Conductance: 10%

Drawdown: <0.5 ft from initial

Dissolved Oxygen: <0.5 mg/L

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah

5102 LaRoche Ave

Savannah, GA 31404

912-354-7858

Fax: 912-352-0165

## Report To:

Contact:	Ryan Gerber	Bill To:	Mike Dever	Shaded Areas For Internal Use Only
Company:	Arcadis	Contact:	Mike Dever	Lab Lot #
Address:	801 Corporate Center Dr., Ste 300 Raleigh, NC 27607	Company:	Ashland Inc.	
Phone:	919-854-1282	Address:	5200 Blazer Pkwy, EH&S DS-4 Dublin, OH 43017	Package Sealed
Fax:	919-854-8445	Phone:	614-790-1586	Yes Received on Ice
Email:	<a href="mailto:ryan.gerber@arcadis-us.com">ryan.gerber@arcadis-us.com</a>	Fax:		Yes Yes N/A
		PO #:	Quote:	Temperature °C of Cooler

Sampler Name: <b>MATTHEW ECKMAIR</b>	Signature: 	Refrg #	# / Cont.	Within Hold Time	Preserv.	Indicated
Project Name: <b>Ashland Greensboro</b>	Project Number: <b>OH009000.NC10.16400</b>	Volume	Preserv.	Yes	No	No
Project Location: <b>Greensboro, NC</b>	Date Required	Hard Copy:	Matrix	pH Check OK	Res CL <sub>2</sub> Check OK	N/A
Lab PM: <b>Jerry Lanier</b>		Fax:	VOCs (8260B)	Sample Labels and COC Agree	COC not present	
Laboratory ID	Client Sample ID	Sampling Date	Time	Comments / Remarks		
	MW-3	9/20/16	1050	w g 1		
	MW-6R		1340	w g 1 1		
	MW-7S		1225	w g 1 1		1,2-dichlorobenzene included with all 8260
	MW-7M		1200	w g 1		1,4-dioxane included with all 8270
	MW-7D		1125	w g 1 1		
	MW-7BR		1520	w g 1		
	MW-11	9/19/16	1735	w g 1 1		
	MW-12	9/20/16	0920	w g 1		
	MW-12D		0345	w g 1 1		
	MW-16		1305	w g 1		
	MW-17D		0815	w g 1		
	MW-19		1015	w g 1		
RELINQUISHED BY: <b>MATTHEW ECKMAIR</b>	COMPANY: <b>ANTEA GROUP</b>	DATE: <b>9/21/16</b>	TIME: <b>0950</b>	RELINQUISHED BY: <b>COMPANY:</b>	DATE: <b></b>	TIME: <b></b>
RELINQUISHED BY: <b></b>	COMPANY: <b></b>	DATE: <b></b>	TIME: <b></b>	RELINQUISHED BY: <b>COMPANY:</b>	DATE: <b></b>	TIME: <b></b>
Matrix Key	Container Key	Preservative Key		Comments: Send total of 23 VOC and 6 SVOC Bottle Sets plus 2 TB Please deliver Bottles to: <b>Antea Group</b> <b>Attn: Matthew Eckmair</b> <b>3530 Toringdon Way, STE 106</b> <b>Charlotte, NC 28277</b>	Date Received <b>/ /</b>	Courier: <b></b> Hand Delivered <b></b>
WW = Wastewater	SE = Sediment	1. HCl, Cool to 4°				
W = Water	SO = Solid	2. H <sub>2</sub> SO <sub>4</sub> , Cool to 4°				
S = Soil	DL = Drum Liquid	3. HNO <sub>3</sub> , Cool to 4°				
SL = Sludge	DS = Drum Solid	4. NaOH, Cool to 4°				
MS = Miscellaneous	L = Leachate	5. NaOH/Zn, Cool to 4°				
OL = Oil	W = Wipe	6. Cool to 4°				
A = Air	O =	7. None				

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Savannah**

5102 LaRoche Ave

Savannah, GA 31404

912-354-7858

Fax: 912-352-0165

## Report To:

Contact: Ryan Gerber  
 Company: ARCADIS  
 Address: 801 Corporate Center Dr., Ste 300  
 Raleigh, NC 27607  
 Phone: 919-854-1282  
 Fax: 919-854-8445  
 Email: [Ryan.gerber@arcadis-us.com](mailto:Ryan.gerber@arcadis-us.com)

## Shaded Areas For Internal Use Only

		Bill To:		Lab Lot #	
Contact:	Ryan Gerber	Contact:	Mike Dever	Package Sealed	Samples Sealed
Company:	ARCADIS	Company:	Ashland Inc.	Yes	Yes
Address:	5200 Blazer Pkwy, EH&S DS-4	Address:	Dublin, OH 43017	Received on Ice	Samples Intact
Phone:	614-790-1586	Fax:		Yes	Yes
Fax:		Email:	<a href="mailto:PO#_Quote:_">PO#_Quote:_</a>	Temperature °C of Cooler	
Sampler Name: <b>M.ECKMAIR</b>	Signature: 	Refng #		Within Hold Time	Preserv. Indicated
Project Number: <b>OH009000.NC10.16400</b>	# / Cont.	Yes	No	Yes	No
Project Location: <b>Greensboro, NC</b>	Volume	pH Check OK		Res CL <sub>2</sub> Check OK	
Lab PM: <b>Jerry Lanier</b>	Preserv.	Yes	No	Yes	No
Laboratory ID	Client Sample ID	Sample Labels and COC Agree			
MS-MSD		Date	Time	Matrix	COC not present
		Sampling Date	Sampling Time	VOCs (8260B)	
		9/20/14	0740	W	g
	MW-22	07/18	w	g	1
	MW-22BR	07/18	w	g	1
	MW-27S	10/0	w	g	1
	MW-27D	1130	w	g	1
	MW-29S	1300	w	g	1
	MW-29D	1330	w	g	1
	MW-30	1420	w	g	1
	EB-1	1335	w	g	1
	DW-1	1530	w	g	1
	DUP-1	—	w	g	1
	DUP-2	—	w	g	1
	TRIP BLANK	—	—	W	1
RELINQUISHED BY: <b>MATTHEW ECKMAIR</b>	COMPANY: <b>ANTEA GROUP</b>	DATE: <b>9/21/14</b>	TIME: <b>0950</b>	RELINQUISHED BY: COMPANY: DATE: TIME:	
RELINQUISHED BY: <b>MATTHEW ECKMAIR</b>	COMPANY: <b>ANTEA GROUP</b>	DATE: <b>9/21/14</b>	TIME: <b>0950</b>	RELINQUISHED BY: COMPANY: DATE: TIME:	
Matrix Key	Container Key	Comments: Send total of 23 VOC and 6 SVOC Bottle Sets plus 2 TB Please deliver Bottles to: <b>Antea Group</b> <b>Attn: Matthew Eckmair</b> <b>3530 Toringdon Way, STE 100</b> <b>Charlotte, NC 28277</b>			
WW = Wastewater W = Water S = Soil SL = Sludge MS = Miscellaneous OL = Oil A = Air	SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate W = Wipe O =	1. Plastic 2. VOA Vial 3. Sterile Plastic 4. Amber Glass 5. Widemouth Glass 6. Other	1. HCl, Cool to 4° 2. H <sub>2</sub> SO <sub>4</sub> , Cool to 4° 3. HNO <sub>3</sub> , Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. Cool to 4° 7. None	Date Received Courier:	/ /

**SURFACE WATER SAMPLING FORM**

<b>PROJECT/CLIENT:</b>	Ashland Greensboro		
<b>DATE:</b>	9/20/2016	<b>TIME:</b>	15:54
<b>WEATHER CONDITIONS:</b>	78°F, Sunny, Lt. Winds		

<b>SAMPLE LOCATION (WATERBODY NAME):</b>	Unnamed stream/creek south of Patterson St and east of Holden RD		
<b>SAMPLE DEPTH:</b>	0.2'	<b>SURFACE WATER FLOW RATE:</b>	Low
<b>SAMPLE SITE DESCRIPTION:</b>	culvert south of Immanuel Rd		

<b>SAMPLE COLLECTION METHOD:</b>	Allow jars to fill positioning open mouth of bottle upstream		
<b>COLLECTION TIME:</b>	15:55		
<b>SAMPLE INFORMATION:</b>	<b>COND. (mS/cm):</b> 7.43	<b>TEMP(C°):</b> 0.326	<b>D.O. (g/ml)</b> 23.69
<b>ANALYSIS:</b>	<b>CONTAINERS:</b> x3 40 ml	<b>SAMPLE PREP/PRESERVATION:</b> HCL	

<b>Turbidity:</b>	28.1
<b>ORP:</b>	-10.9

<b>Gauge data</b>	DTW	DTB
Brick in Concrete	1.40'	1.55'

<b>CHAIN OF CUSTODY FORM:</b>	
<b>SHIPPED VIA:</b>	Delivered to Courier (TA-Charlotte)
<b>CHAIN OF CUSTODY SIGNED BY:</b>	Matthew Eckmair

*Matthew Eckmair*

**LABORATORY:** Test America  
**SENT ON:**

**SURFACE WATER SAMPLING FORM**

<b>PROJECT/CLIENT:</b>	Ashland Greensboro
<b>DATE:</b>	9/20/2016
<b>WEATHER CONDITIONS:</b>	78°F, Sunny, Lt. Winds
<b>TIME:</b>	16:00

<b>SAMPLE LOCATION (WATERBODY NAME):</b>	Unnamed stream/creek south of Patterson St and east of Holden RD
<b>SAMPLE DEPTH:</b>	0.2'
<b>SAMPLE SITE DESCRIPTION:</b>	Behind house in curve of Belmar St

<b>SAMPLE COLLECTION METHOD:</b>	Allow jars to fill positioning open mouth of bottle upstream		
<b>COLLECTION TIME:</b>	16:05		
<b>SAMPLE INFORMATION:</b>			
pH:	7.31		
COND. (mS/cm):	0.308		
<b>ANALYSIS:</b>			
Gauge data	DTW	DTB	
Rebar		7.72	7.98
			Turbidity: 31.2
			ORP: 26.6

**SAMPLE PREP/PRESERVATION:**  
HCL

<b>CHAIN OF CUSTODY FORM:</b>	
<b>SHIPPED VIA:</b>	Delivered to Courier (TA-Charlotte)
<b>CHAIN OF CUSTODY SIGNED BY:</b>	Matthew Eckmair
<b>LABORATORY:</b>	Test America
<b>SENT ON:</b>	

*Matthew Eckmair*

**SURFACE WATER SAMPLING FORM**

<b>PROJECT/CLIENT:</b>	Ashland Greensboro		
<b>DATE:</b>	9/20/2016	<b>TIME:</b>	16:18
<b>WEATHER CONDITIONS:</b>	78°F, Sunny, Lt. Winds		

<b>SAMPLE LOCATION (WATERBODY NAME):</b>	Unnamed stream/creek south of Patterson St and east of Holden RD		
<b>SAMPLE DEPTH:</b>	0.2'		
<b>SAMPLE SITE DESCRIPTION:</b>	Pedestrian bridge at end of Swan Ave		

<b>SAMPLE COLLECTION METHOD:</b>	Allow jars to fill positioning open mouth of bottle upstream					
<b>COLLECTION TIME:</b>	16:20					
<b>SAMPLE INFORMATION:</b>	<b>COND. (mS/cm):</b>	0.289	<b>TEMP(C°):</b>	25.36	<b>D.O. (g/ml):</b>	4.7
<b>ANALYSIS:</b>	<b>CONTAINERS:</b>	x3 40 ml	<b>SAMPLE PREP/PRESERVATION:</b> HCL			

Gauge data	DTW	DTB	Turbidity: 40.5
Horizontal pipe (mid)	1.93	2.5	ORP: 26.8

<b>CHAIN OF CUSTODY FORM:</b>			
<b>SHIPPED VIA:</b>	Delivered to Courier (TA-Charlotte)		
<b>CHAIN OF CUSTODY SIGNED BY:</b>	Matthew Eckmair		

*Matthew Eckmair*

<b>LABORATORY:</b>	Test America
<b>SENT ON:</b>	

**SURFACE WATER SAMPLING FORM**

<u>PROJECT/CLIENT:</u>	Ashland Greensboro
<u>DATE:</u>	9/20/2016
<u>WEATHER CONDITIONS:</u>	78°F, Sunny, Lt. Winds
<u>TIME:</u>	16:25

<u>SAMPLE LOCATION (WATERBODY NAME):</u>	Unnamed stream/creek south of W Florid St and west of Belmar RD
<u>SAMPLE DEPTH:</u>	0.2'
<u>SAMPLE SITE DESCRIPTION:</u>	Culvert south of Florida St

<u>SAMPLE COLLECTION METHOD:</u>	Allow jars to fill positioning open mouth of bottle upstream
<u>COLLECTION TIME:</u>	16:30
<u>SAMPLE INFORMATION:</u>	
<u>pH:</u>	7.53
<u>COND. (mS/cm):</u>	0.278
<u>ANALYSIS:</u>	
<u>CONTAINERS:</u>	x3 40 ml

<u>TEMP(C°):</u>	24.54
<u>D.O. (g/ml):</u>	4.01
<u>SAMPLE PREP/PRESERVATION:</u>	HCL

<u>Turbidity:</u>	183
<u>ORP:</u>	26.1

DUP-1 Location

<u>CHAIN OF CUSTODY FORM:</u>	
<u>SHIPPED VIA:</u>	Delivered to Courier (TA-Charlotte)
<u>CHAIN OF CUSTODY SIGNED BY:</u>	Matthew Eckmair

LABORATORY: Test America  
SENT ON:

*Matthew Eckmair*





## CALIBRATION LOG HANNA 9829

Instrument: HANNA 9879

Serial Number:g0062423/k3452263

ES:1558

### Physical Calibration

Battery Check	100%	Condition	Replace Date:	New
DO Membrane	OK	Condition	Replace Date:	New

### pH Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
pH 4.00	7606253	6/30/2018	4.38	22.00	4.00
pH 7.00	7605027	5/30/2018	7.19	22.00	7.00
pH 10.00	7605537	6/30/2018	10.07	22.00	10.00

### Conductivity Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
1413 us/cm	2606A89	3/1/2018	1701	22.00	1413

### Dissolved Oxygen Calibration

Calibration Standard	inHG	mmHG	Initial Reading	Temp. °C	Calibration Reading
Saturated DO		748.8	95.5%	22.00	98%

### Oxygen Reduction Potential

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
200 mVolts	2606D35	3/1/2017	177.60	22.00	200

### TURBIDITY

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
0.1 FNU	9059	7/1/2018	3.70	22.00	0.10
20 FNU	9049	1/1/2018	13.90	22.00	20.00
200 FNU	8801	10/1/2017	168.00	22.00	200.00

Signature:LMS

Date:9/16/2016



CALIBRATION LOG  
HORIBA U52

Instrument: Horiba U-52

Serial Number: YGJ17X7

ES #: 1157

Physical Calibration

Battery Check	100%	Voltage	Acceptable Range	100%
		Control Unit		100%

DO Membrane	Condition	Replace Date:	5/10/2014
pH Internal Solution	Condition	Replace Date:	5/2/2014

pH Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
pH 4.00	E016-12	1/21/2017	4.12	22.00	4.00
pH 7.00	E037-14	2/13/2017	6.69	22.00	7.00
pH 10.00	E009-04	1/12/2016	---	---	---

Conductivity Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
0.000 µs/cm	---	---	0.000	22.00	0.000
718 µs/cm	11383	11/26/2015	689	22.00	718
5.00 ms/cm	11385	11/26/2015	4.54	22.00	5.00
53.0 ms/cm	11384	11/26/2015	49.1	22.00	53.00

Dissolved Oxygen Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
Zero Dissolved Oxygen	---	---	---	---	---
Saturated DO @ 22.00 °C	---	---	92.9%	22.00	98%

Turbidity Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
0.0 NTU	11489	2/17/2016	0.0	22.00	0.0
100 NTU	201046-3	11/13/2015	86.3	22.00	100
800 NTU	201046-4	11/13/2015	742	22.00	800

Oxygen Reduction Potential Calibration

Calibration Standard	Lot #	Exp. Date	Initial Reading	Temp. °C	Calibration Reading
210 mVolts	11469	1/23/2016	206	22.00	210

Signature: \_\_\_\_\_ LMS \_\_\_\_\_

Date: 9/16/16 \_\_\_\_\_

**Attachment 2****Investigation-Derived Waste  
Disposal Manifest**

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number N0102419101	2. Page 1 of 1	3. Emergency Response Phone 1-800-620-7300	4. Manifest Tracking Number <b>010241910 FLE</b>	
5. Generator's Name and Mailing Address ASHLAND INC - RIDS REMEDIATION 2602 PATTERSON ST GREENSBORO NC 27407 Generator's Phone: 336-239-3103 ATTN: KYLE COPINGER		Generator's Site Address (if different than mailing address) ASHLAND INC - RIDS REMEDIATION 2602 PATTERSON ST GREENSBORO NC 27407				
6. Transporter 1 Company Name ASHLAND INC		U.S. EPA ID Number N0102419101				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address HEXZO SOLUTIONS CHARLOTTE PLANT 3000 CLERMONT DR CHARLOTTE NC 28209 Facility's Phone: 704-331-2121		U.S. EPA ID Number N0102419101				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. Hexzo Solutions 3026, Liquid, Agg. (DAM, DODG, DODG), 3, III, BRG (7), 30 TSP, Green Wts, Acute-3	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes 0020 0040
		No.	Type			
1.						
2.						
3.						
4.						
14. Special Handling Instructions and Additional Information Emergency Phone: HEXZO SOLUTIONS 1-800-620-3048 750117(10)						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name KATHLEEN A. MITT ASHLAND INC		Signature		Month Day Year 11/17/16		
16. International Shipments <input type="checkbox"/> Import to U.S.		<input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____		
Transporter signature (for exports only):						
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name KATHLEEN A. MITT Signature Month Day Year 11/17/16						
Transporter 2 Printed/Typed Name Signature Month Day Year 11/17/16						
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity		<input type="checkbox"/> Type		<input type="checkbox"/> Residue		<input type="checkbox"/> Partial Rejection
Manifest Reference Number:						
18b. Alternate Facility (or Generator) Facility's Phone:		U.S. EPA ID Number				
18c. Signature of Alternate Facility (or Generator) Signature Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	2.	3.	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year						

# nexo<sup>TM</sup> solutions

Customer: ASHLAND INC -  
EH&S  
REMEDIATION  
2802 PATTERSON

EPA ID#NCD024599011

Manifest Number:010241910FLE

Line Item	Waste Codes	Waste Code Sub-Category	WW / NWW	UHC's
1	D039 D040		NWW	trans-1,2-Dichloroethylene

\* WW /NWW = Waste Water / Non Waste Water

This is to notify that to be land disposed, this waste must meet the applicable land disposal restriction treatment standard in 40 CFR 268 Subpart D.

Customer Signature:

Date: 11/17/14

*[Signature]*  
AUTHORIZED AGENT  
FOR ASHLAND WC.

**Attachment 3****Summary of Historical Groundwater  
Analytical Results**

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-1 12/14/1999	MW-1 4/9/2007
<u>Field Parameters</u>			
Temperature (°C)	NE	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<25	<250
Carbon Tetrachloride	0.3	9.6	<10
Chloroform	70	17	11
1,1-Dichloroethane	6	24	33
1,2-Dichloroethane	0.4	87	74
1,1-Dichloroethene	350	1.5	<10
cis-1,2-Dichloroethene	70	<1	<10
1,2-Dichloropropane	0.6	NA	<10
Ethylbenzene	600	<1	<10
Methylene Chloride	5	<5	<50
Tetrachloroethene	0.7	160	110
Toluene	600	<1	<10
1,1,1-Trichloroethane	200	25	<10
Trichloroethene	3	14	17
Vinyl Chloride	0.03	NA	<10
Xylenes (Total)	500	<2	<20
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,2-Dichlorobenzene	20	NA	<10
1,4-Dichlorobenzene	6	NA	<10
Diethylphthalate	5,000	NA	<10
3&4-Methylphenol	400/40	NA	<10
Naphthalene	21	NA	<10
1,2,4-Trichlorobenzene	70	NA	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-1D 12/14/1999	MW-1D 4/9/2007	MW-1D 6/23/2008	MW-1D 6/9/2009	MW-1D 6/14/2010	MW-1D 6/20/2011	MW-1D 5/1/2012	MW-1D 6/19/2013
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	19.80	20.5	19.03	19.65	19.39	22.34
pH (standard units)	6.5 - 8.5	NR	NR	5.78	5.82	5.10	5.86	5.58	5.30
Dissolved Oxygen (mg/L)	NE	NR	NR	0.87	2.8	0.26	1.31	1.86	0.00
Specific Conductance (µS/cm)	NE	NR	NR	598	482	490	576	484	503
Oxidation-Reduction Potential (mV)	NE	NR	NR	153	94.7	-2.8	129.5	13.3	396.0
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<120	<25	<2,500	<1,200	<1,200	<130 UJ	<1300	<1300
Carbon Tetrachloride	0.3	21	550	380	260	240	81 J	130	93
Chloroform	70	29	720	680	590	630	170 J	640	580
1,1-Dichloroethane	6	27	1,300	1,200	1,300	1,300	490 J	1,600	1,600
1,2-Dichloroethane	0.4	NA	NA	<100	<250	63	13 J	54	50
1,2-Dichlorobenzene	20	NA	NA	NA	NA	480	12 J	330	390
1,1-Dichloroethene	350	140	5,100	4,200	4,000	4,000	500 J	3,900	3,700
cis-1,2-Dichloroethene	70	<5	78	<100	<250	110	15 J	160	190
Ethylbenzene	600	<5	190	220	<250	120	9.5 J	110	95
Methylene Chloride	5	480	7,900	6,600	6,700	5,000	200 J	4,800	4,600
Tetrachloroethene	0.7	330	6,800	7,600	7,200	7,700	720 J	7,100	8,500
Toluene	600	12	1,600	1,600	1,500	1,100	58 J	430	230
1,1,1-Trichloroethane	200	14	210	170	<250	110	67 J	110	260
Trichloroethene	3	170	810	800	710	770	120 J	830	870
Vinyl Chloride	0.03	NA	NA	<100	<250	<50	<5.0 UJ	<50	<50
Xylenes (Total)	500	16	770	910	950	680	46 J	470	380
<u>SVOCS (USEPA Method 8270C) µg/L</u>									
1,2-Dichlorobenzene	20	NA	200	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	22	NA	NA	NA	NA	NA	NA
Diethylphthalate	5,000	NA	<10	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	700	NA	<10	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	35/0.35	NA	<10	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	170	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-2 12/15/1999	MW-2 4/10/2007	MW-2 6/24/2008	MW-2 6/10/2009	MW-2 6/15/2010	MW-2 6/20/2011	MW-2 5/2/2012	MW-2 6/19/2013
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	18.74	19.02	17.94	18.81	18.45	18.17
pH (standard units)	6.5 - 8.5	NR	NR	4.77	4.74	4.63	4.97	4.27	4.65
Dissolved Oxygen (mg/L)	NE	NR	NR	1.21	1.51	0.41	1.14	1	0.71
Specific Conductance (µS/cm)	NE	NR	NR	2270	1100	620	979	788	309
Oxidation-Reduction Potential (mV)	NE	NR	NR	253	135.9	72.3	207.5	159.4	288
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	15,000	7,200	18,000	3,400	<2,500	<2500	<2500	<630
Chloroform	70	<250	74	<250	<500	<100	<100	<100	<25
1,1-Dichloroethane	6	1,900	720	1,200	530	230	590	470	120
1,2-Dichloroethane	0.4	NA	NA	<250	<500	<100	<100	<100	<25
1,2-Dichlorobenzene	20	NA	NA	NA	NA	<100	180	<100	<25
1,1-Dichloroethene	350	5,000	2,200	<250	1,400	670	1,900	1,400	390
cis-1,2-Dichloroethene	70	910	690	1,200	630	390	1500	920	250
Ethylbenzene	600	440	150	420	<500	<100	170	<100	<25
Methylene Chloride	5	38,000	6,300	12,000	3,300	630	2,600	1,500	150
Tetrachloroethene	0.7	26,000	12,000	28,000	10,000	6,200	17,000	7,700	2,700
Toluene	600	1,800	640	2,300	<500	130	660	320	39
1,1,1-Trichloroethane	200	<250	46	<250	<500	<100	<100	<100	<25
Trichloroethene	3	24,000	10,000	17,000	6,700	4,100	12,000	6300	1900
Vinyl Chloride	0.03	NA	NA	<250	<500	<100	<100	<100	<25
Xylenes (Total)	500	1,700	430	1,500	<1,000	<200	520	210	<50
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2-Dichlorobenzene	20	NA	130	NA	NA	NA	NA	44	NA
1,4-Dichlorobenzene	6	NA	<50	NA	NA	NA	NA	<20	NA
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	310	NA
3-Methylphenol/4-Methylphenol	400/40	NA	<50	NA	NA	NA	NA	<41	NA
1,2,4-Trichlorobenzene	70	NA	<50	NA	NA	NA	NA	<20	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-2D 6/25/1998	MW-2D 6/10/1999	MW-2D 12/15/1999	MW-2D 6/22/2000	MW-2D 6/5/2001	MW-2D 6/17/2002	MW-2D 6/26/2003	MW-2D 6/24/2004
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	NA	ND	<50	<250	<50	<500	<120	<120
Benzene	1	NA	ND	<2	<10	<2	<50	<5	<5
2-Butanone (MEK)	4,000	<120	ND	<20	<100	<20	<50	<50	<50
Carbon Tetrachloride	0.3	NA	ND	<2	<10	<2	<50	<5	<5
Chloroform	70	<25	ND	<2	<10	<2	<50	<5	<5
1,1-Dichloroethane	6	<25	ND	<2	<10	<2	<50	<5	<5
1,1-Dichloroethene	350	<25	ND	5	34	8	<50	16	20
cis-1,2-Dichloroethene	70	<25	ND	<2	<10	<2	<50	6.2	27
Ethylbenzene	600	NA	ND	<2	<10	<2	<50	<5	<5
Methylene Chloride	5	<25	ND	<10	<50	<10	<50	<25	<25
Tetrachloroethene	0.7	200	140	89	400	110	580	320	280
Toluene	600	<25	ND	7.4	<10	<2	<50	<5	<5
1,1,1-Trichloroethane	200	<25	ND	<2	<10	<2	<50	<5	<5
Trichloroethene	3	440	400	200	970	220	1,500	830	1,100
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<25	ND	<4	<20	<4	<100	<10	<10
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	<10	NA	NA	<10	85	<10	<10	<10
1,2-Dichlorobenzene	20	<10	NA	NA	<10	130	<10	<10	<10
1,4-Dichlorobenzene	6	<10	NA	NA	<10	15	<10	<10	<10
3-Methylphenol/4-Methylphenol	400/40	<10	NA	NA	<10	<10	<10	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-2D 6/8/2005	MW-2D 6/21/2006	MW-2D 4/10/2007	MW-2D 6/24/2008	MW-2D 6/10/2009	MW-2D 6/15/2010	MW-2D 6/20/2011	MW-2D 5/2/2012	MW-2D 6/19/2013
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	20.18	18.98	18.09	18.88	19.41	18.94
pH (standard units)	6.5 - 8.5	NR	NR	NR	6.95	6.10	5.90	5.57	6.42	6.01
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	6.44	13.28	1.77	1.11	4.44	2.11
Specific Conductance (µS/cm)	NE	NR	NR	NR	90	70	80	798	82	78
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	207	65.7	-62.1	114.7	-42.9	226
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<250	<250	<25	<500	<500	<500	<500	<1300	<1300
Benzene	1	<10	<10	<1	<20	<20	<20	<20	<50	<50
2-Butanone (MEK)	4,000	<100	<10	<10	<200	<500	<200	<200	<500	<500
Carbon Tetrachloride	0.3	<10	<10	1.2	<20	<100	<20	<20	<50	<50
Chloroform	70	<10	<10	1.4	<20	<100	<20	<20	<50	<50
1,1-Dichloroethane	6	<10	<10	<1	<20	<100	<20	<20	<50	<50
1,1-Dichloroethene	350	<10	16	14	22	<100	<20	<20	53	64
cis-1,2-Dichloroethene	70	<10	14	26	20	<100	<20	31	<50	<50
Ethylbenzene	600	<10	<10	<1	<20	<100	<20	<20	<50	<50
Methylene Chloride	5	<50	<50	<5	<100	<100	<100	<100	<250	<250
Tetrachloroethene	0.7	180	410	320	660	740	870	420	1,100	1,700
Toluene	600	<10	<10	<1	<20	<100	<20	<20	<50	<50
1,1,1-Trichloroethane	200	<10	<10	<1	<20	<100	<20	<20	<50	<50
Trichloroethene	3	520	1,600	1,200	2,500	2,700	3,300	1,600	4,900	7,100
Vinyl Chloride	0.03	NA	NA	NA	<20	<100	<20	<20	<50	<50
Xylenes (Total)	500	<20	<20	<2	<40	<200	<40	<40	<100	<100
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,2,4-Trichlorobenzene	70	<10	<11	<9.8	<9.4	<10	<9.7	<1.1	<1.0	<0.96
1,2-Dichlorobenzene	20	<10	<11	<9.8	<9.4	<10	<9.7	<1.1	<1.0	<0.96
1,4-Dichlorobenzene	6	<10	<11	<9.8	<9.4	<10	<9.7	<1.1	<1.0	<0.96
3-Methylphenol/4-Methylphenol	400/40	<10	<11	<9.8	<9.4	<10	<9.7	<2.2	<2.0	<1.9

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-2BR 6/21/2006	MW-2BR 12/7/2006	MW-2BR 4/10/2007	MW-2BR 12/13/2007	MW-2BR 6/24/2008	MW-2BR 12/8/2008	MW-2BR 6/10/2009	MW-2BR 12/29/2009	MW-2BR 6/15/2010
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	18.13	19.78	16.54	19.23	15.61	18.59
pH (standard units)	6.5 - 8.5	NR	NR	NR	6.35	6.88	6.19	6.30	6.42	6.32
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	0.35	0.33	0.21	1.29	0.39	0.51
Specific Conductance (µS/cm)	NE	NR	NR	NR	321	298	266	243	271	263
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	-110	68	-157	92	50	-85.9
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Benzene	1	160	120	250	230	270	<200	<200	<200	<200
Carbon Disulfide	700	NA	21	2.8	<100	<400	<400	<1,000	<1,000	<400
Carbon Tetrachloride	0.3	<50	<50	3.5	<50	<200	<200	<1,000	<1,000	<200
Chloroform	70	<50	18	24	<50	<200	<200	<1,000	<1,000	<200
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	<1,000	<200	
1,1-Dichloroethane	6	<50	<50	13	<50	<200	<200	<1,000	<1,000	<200
1,2-Dichloroethane	0.4	NA	<50	13	<50	<200	<200	<1,000	<1,000	<200
1,1-Dichloroethene	350	1,600	1,300	2,900	2,400	2,500	1,800	1,600	1,300	1,200
cis-1,2-Dichloroethene	70	<50	33	61	51	<200	<200	<1,000	<1,000	490
trans-1,2-Dichloroethene	100	NA	<50	1.7	<50	<200	<200	<1,000	<1,000	<200
Ethylbenzene	600	<50	<50	1.2	<50	<200	<200	<1,000	<1,000	<200
Methylene Chloride	5	580	370	1,000	<250	<1,000	<1,000	<1,000	<1,000	<1,000
Tetrachloroethene	0.7	9,800	3,400	30,000	31,000	34,000	25,000	24,000	12,000	23,000
Toluene	600	<50	<50	4.1	<50	<200	<200	<1,000	<1,000	<200
1,1,1-Trichloroethane	200	<50	160	400	380	420	270	<1,000	<1,000	<200
1,1,2-Trichloroethane	NE	NA	<50	4.0	<50	<200	<200	<1,000	<1,000	<200
Trichloroethene	3	7,000	4,800	13,000	12,000	14,000	10,000	9,600	5,600	9,000
Vinyl Chloride	0.03	NA	NA	NA	<50	<200	<200	<1,000	<1,000	<200
Xylenes (Total)	500	<50	<100	58	<100	<400	<400	<2,000	<2,000	<400
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	21	NA	99	NA	68	NA	99	NA	NA
1,2-Dichlorobenzene	20	63	NA	170	NA	120	NA	150	NA	NA
1,4-Dichlorobenzene	6	<10	NA	11	NA	<9.4	NA	12	NA	NA
Dimethylphthalate	NS	<10	NA	19	NA	<9.4	NA	<9.4	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-2BR 6/20/2011	MW-2BR 5/2/2012
<u>Field Parameters</u>			
Temperature (°C)	NE	18.93	18.75
pH (standard units)	6.5 - 8.5	6.63	6.66
Dissolved Oxygen (mg/L)	NE	0.75	1.43
Specific Conductance (µS/cm)	NE	295	218
Oxidation-Reduction Potential (mV)	NE	-16.1	-78.8
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Benzene	1	<10 UJ	<200
Carbon Disulfide	700	<20 UJ	<400
Carbon Tetrachloride	0.3	<10 UJ	<200
Chloroform	70	<10 UJ	<200
1,2-Dichlorobenzene	20	<10 UJ	<b>200</b>
1,1-Dichloroethane	6	<10 UJ	<200
1,2-Dichloroethane	0.4	<10 UJ	<200
1,1-Dichloroethene	350	<b>12 J</b>	<b>1,500</b>
cis-1,2-Dichloroethene	70	<b>320 J</b>	<b>740</b>
trans-1,2-Dichloroethene	100	<10 UJ	<200
Ethylbenzene	600	<10 UJ	<200
Methylene Chloride	5	<50 UJ	<1000
Tetrachloroethene	0.7	<b>1,200 J</b>	<b>25,000</b>
Toluene	600	<10 UJ	<200
1,1,1-Trichloroethane	200	<b>140 J</b>	<200
1,1,2-Trichloroethane	NE	<10 UJ	<200
Trichloroethene	3	<b>400 J</b>	<b>7,300</b>
Vinyl Chloride	0.03	<10 UJ	<200
Xylenes (Total)	500	<b>32 J</b>	<400
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,4-Dioxane	3	NA	<b>25</b>
1,2,4-Trichlorobenzene	70	NA	<b>81</b>
1,2-Dichlorobenzene	20	NA	<b>140</b>
1,4-Dichlorobenzene	6	NA	<9.7
Dimethylphthalate	NS	NA	<9.7

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-3 6/26/1998	MW-3 6/11/1999	MW-3 12/14/1999	MW-3 6/23/2000	MW-3 6/6/2001	MW-3 6/18/2002	MW-3 6/25/2003	MW-3 6/24/2004
<b>Field Parameters</b>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<b>VOCs (USEPA Method 8260B) µg/L</b>									
Acetone	6,000	NA	6,900	<12,000	<10,000	<5,000	<5,000	<5,000	2,700
Benzene	1	NA	2,600	2,200	1,600	1,400	1,800	4,400	2,100
Carbon Tetrachloride	0.3	NA	ND	<500	<400	<200	<500	<200	<100
Chloroform	70	<2,500	ND	<500	<400	<200	<500	<200	110
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<2,500	830	760	730	500	550	530	500
1,1-Dichloroethene	350	3,900	4,100	4,500	4,200	2,700	2,600	2,700	3,700
cis-1,2-Dichloroethene	70	<2,500	710	560	670	1,200	3,200	7,900	4,600
Ethylbenzene	600	NA	470	<500	<400	<200	<500	200	<100
2-Hexanone	280 <sup>c</sup>	NA	5,200	NA	NA	2,100	<2,500	<2,000	<1,000
Methylene Chloride	5	46,000	32,000	33,000	28,000	17,000	12,000	9,000	10,000
Tetrachloroethene	0.7	48,000	51,000	42,000	36,000	21,000	20,000	19,000	32,000
Toluene	600	3,800	6,100	4,000	2,900	1,700	1,600	1,600	2,400
1,1,1-Trichloroethane	200	<2,500	390	<500	<400	240	<500	<200	130
Trichloroethene	3	17,000	28,000	24,000	18,000	12,000	11,000	11,000	12,000
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<2,500	2,350	1,200	960	760	<1,000	1,200	1,000
<b>SVOCs (USEPA Method 8270C) µg/L</b>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	NA	23	26	<200	<100	<100
1,2-Dichlorobenzene	20	<1,000	NA	NA	56	78	<200	120	220
Dimethylphthalate	NS	<1,000	NA	NA	3,400	3,200	1,500	1,200	1,600
Di-n-butylphthalate	700	NA	NA	NA	<10	<10	<200	<100	<100
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-3 6/8/2005	MW-3 6/22/2006	MW-3 4/10/2007	MW-3 6/23/2008	MW-3 6/10/2009	MW-3 6/15/2010	MW-3 5/1/2012	MW-3 6/19/2013
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	20.46	19.25	19.36	20.28	24.22
pH (standard units)	6.5 - 8.5	NR	NR	NR	5.06	4.87	4.65	4.73	4.61
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	0.83	1.46	0.3	1.16	0
Specific Conductance (µS/cm)	NE	NR	NR	NR	1049	882	992	970	888
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	21	120.2	61.9	132.3	256
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<5,000	<5,000	<5,000	<5,000	<6,200	<6,200	<6300	<6300
Benzene	1	1,100	270	430	610	350	340	<250	<250
Carbon Tetrachloride	0.3	<200	<200	<200	<200	<1200	<250	<250	<250
Chloroform	70	<200	<200	<200	<200	<1,200	<250	<250	<250
1,2-Dichlorobenzene	20	NA	NA	NA	NA	<1,200	290	<250	<250
1,1-Dichloroethane	6	570	530	550	520	<1,200	410	420	390
1,1-Dichloroethene	350	3,800	3,200	3,400	3,100	2,800	1,900	2,200	1,900
cis-1,2-Dichloroethene	70	3,100	420	1,300	3,000	2,300	3,200	5,300	5,200
Ethylbenzene	600	270	<200	<200	<200	<1,200	<250	<250	<250
2-Hexanone	280 <sup>c</sup>	<200	<200	<2,000	<2,000	<6,200	<2,500	<2500	<2500
Methylene Chloride	5	6,500	5,300	3,900	2,800	2,400	1,800	<1300	<1300
Tetrachloroethene	0.7	34,000	33,000	31,000	36,000	31,000	29,000	17,000	17,000
Toluene	600	1,900	1,100	1,000	1,400	<1,200	870	430	<250
1,1,1-Trichloroethane	200	<200	<200	<200	<200	<1,200	<250	<250	<250
Trichloroethene	3	11,000	8,800	9,500	8,700	6,900	7,000	6,000	5,700
Vinyl Chloride	0.03	NA	NA	NA	<200	<1200	<250	<250	<250
Xylenes (Total)	500	1,100	600	510	630	<2,500	<500	<500	<500
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	410	280	350 J
1,2,4-Trichlorobenzene	70	NA	<96	<50	59	65	<97	50	<61
1,2-Dichlorobenzene	20	NA	180	150	220	240	240	110	91 J
Dimethylphthalate	NS	NA	830	570	550	510	350	78	NA
Di-n-butylphthalate	700	NA	<96	<50	<50	<38	<38	18	<61
Naphthalene	6	NA	NA	<50	<50	<38	<38	3.7	<12

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-3 6/20/2014	MW-3 9/22/2016
<u>Field Parameters</u>			
Temperature (°C)	NE	21.07	23.0
pH (standard units)	6.5 - 8.5	5.72	4.31
Dissolved Oxygen (mg/L)	NE	1.62	1.3
Specific Conductance (µS/cm)	NE	907	716
Oxidation-Reduction Potential (mV)	NE	173.7	211
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<6300	<2500
Benzene	1	<250	<250
Carbon Tetrachloride	0	<250	<250
Chloroform	70	<250	<250
1,2-Dichlorobenzene	20	<250	<250
1,1-Dichloroethane	6	310	390
1,1-Dichloroethene	350	1,600	1,800
cis-1,2-Dichloroethene	70	4,800	6,700
Ethylbenzene	600	<250	<250
2-Hexanone	280 <sup>c</sup>	<2500	<250
Methylene Chloride	5	<1300	<1,300
Tetrachloroethene	0.7	13,000	15,000
Toluene	600	<250	<250
1,1,1-Trichloroethane	200	<250	<250
Trichloroethene	3	4,900	6,100
Vinyl Chloride	0.03	<250	<250
Xylenes (Total)	500	<500	<250
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,4-Dioxane	3	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA
1,2-Dichlorobenzene	20	NA	NA
Dimethylphthalate	NS	NA	NA
Di-n-butylphthalate	700	NA	NA
Naphthalene	6	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-5 12/7/1994	MW-5 3/7/1995	MW-5 9/6/1995	MW-5 12/13/1995	MW-5 3/28/1996	MW-5 6/25/1996	MW-5 9/25/1996	MW-5 12/9/1996
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Carbon Tetrachloride	0.3	28,000	24,000	22,000	31,000	24,000	21,000	16,000	21,000
Chloroform	70	<10,000	<10,000	<5,000	<10,000	<5,000	NA	<5,000	NA
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	350	<10,000	<10,000	<5,000	<10,000	<5,000	<10,000	<5,000	<2,500
cis-1,2-Dichloroethene	70	<10,000	<10,000	<5,000	<10,000	<5,000	NA	<5,000	NA
Ethylbenzene	600	<10,000	<10,000	<5,000	<10,000	<5,000	<10,000	<5,000	<2,500
Methyl Isobutyl Ketone (MIBK)	NE	<50,000	<50,000	<25,000	<50,000	<25,000	NA	<25,000	NA
Methylene Chloride	5	<10,000	<10,000	<5,000	<10,000	5,400	<10,000	6,600	<2,500
Tetrachloroethene	0.7	17,000	12,000	22,000	21,000	18,000	15,000	10,000	16,000
Toluene	600	220,000	220,000	180,000	280,000	190,000	180,000	140,000	180,000
1,1,1-Trichloroethane	200	77,000	68,000	57,000	65,000	54,000	40,000	38,000	55,000
Trichloroethene	3	<10,000	<10,000	<5,000	<10,000	<5,000	<10,000	<5,000	<2,500
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<20,000	<20,000	<5,000	<20,000	<5,000	<10,000	<10,000	<2,500
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	NA	NA	120	130	<100	160	200	360
1,2-Dichlorobenzene	20	NA	NA	400	280	170	400	400	370
2-Methylphenol	NS	NA	NA	360	410	310	250	310	370
3-Methylphenol/4-Methylphenol	400/40	NA	NA	NA	NA	140	210	NA	NA
Benzyl Alcohol	NE	NA	NA	NA	NA	130	170	NA	230
bis(2-Ethylhexyl)phthalate	3	NA	NA	<100	<50	<100	110	130	1,000
Diethylphthalate	6,000	NA	NA	<100	<50	<100	<100	<50	<80

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-5 3/17/1997	MW-5 6/18/1997	MW-5 9/30/1997	MW-5 12/10/1997	MW-5 3/19/1998	MW-5 12/16/1999	MW-5 6/6/2001	MW-5R 8/25/2011
<b>Field Parameters</b>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	21.71
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	5.99
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	0.58
Electrical Conductivity (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	0.613
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	7.1
<b>VOCs (USEPA Method 8260B) µg/L</b>									
Carbon Tetrachloride	0.3	19,000	21,000	18,000	19,000	22,000	20,000	16,000	6,100
Chloroform	70	NA	<2,500	NA	NA	NA	2,300	2,100	910
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	4,000
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	590
1,1-Dichloroethene	7	<2,500	<2,500	<2,500	<2,500	<10,000	1,700	2,000	<250
cis-1,2-Dichloroethene	70	NA	<2,500	NA	NA	NA	<500	<1,000	10,000
Ethylbenzene	600	<2,500	<2,500	<2,500	<2,500	<10,000	660	<1,000	3,100
Methyl Isobutyl Ketone (MIBK)	NE	NA	<12,000	NA	NA	NA	24,000	21,000	<2500
Methylene Chloride	5	3,000	<2,500	<2,500	<2,500	<10,000	<2,500	<5,000	<1300
Tetrachloroethene	0.7	15,000	20,000	17,000	19,000	24,000	18,000	8,700	28,000
Toluene	600	180,000	150,000	160,000	130,000	150,000	170,000	150,000	28,000
1,1,1-Trichloroethane	200	52,000	38,000	35,000	36,000	41,000	38,000	49,000	10,000
Trichloroethene	3	<2,500	<2,500	<2,500	<2,500	<10,000	620	<1,000	3,100
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	<500	<1,000	<250
Xylenes (Total)	500	4,100	<5,000	<2,500	<2,500	<10,000	4,500	1,500	20,000
<b>SVOCS (USEPA Method 8270C) µg/L</b>									
1,2,4-Trichlorobenzene	70	120	92	170	110	94	NA	270	NA
1,2-Dichlorobenzene	20	380	230	250	280	220	NA	340	NA
2-Methylphenol	NS	170	100	110	230	64	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	140	NA	160	220	65	NA	260	NA
Benzyl Alcohol	NE	200	NA	110	230	150	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3	<100	<50	97	<100	<50	NA	<50	NA
Diethylphthalate	6000	<100	<50	<40	<100	<50	NA	58	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-6 12/7/1994	MW-6 3/7/1995	MW-6 9/6/1995	MW-6 12/13/1995	MW-6 3/28/1996	MW-6 6/25/1996	MW-6 9/25/1996	MW-6 12/9/1996
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<12,000	<12,000	<25,000	<25,000	<25,000	<25,000	<25,000	<12,000
Carbon Tetrachloride	0.3	<2,500	<2,500	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500
Chloroform	70	<2,500	<2,500	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500
1,2-Dichlorobenzene	0.6	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	4,000	4,300	<5,000	5,400	<5,000	<5,000	<5,000	4,100
1,2-Dichloroethane	0.4	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	7	3,500	3,500	<5,000	5,200	<5,000	<5,000	<5,000	3,400
cis-1,2-Dichloroethene	70	<2,500	<2,500	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500
Ethylbenzene	600	<2,500	2,800	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500
Methylene Chloride	5	35,000	38,000	20,000	29,000	24,000	16,000	19,000	24,000
Tetrachloroethene	0.7	38,000	47,000	55,000	38,000	36,000	29,000	31,000	42,000
Toluene	600	71,000	68,000	62,000	60,000	57,000	56,000	60,000	60,000
1,1,1-Trichloroethane	200	100,000	80,000	100,000	95,000	98,000	84,000	92,000	110,000
Trichloroethene	3	<2,500	<2,500	<5,000	<5,000	<5,000	<5000	<5000	<2,500
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	10,000	6,800	6,800	10,000	9,300	5,000	5,400	8,700
<u>SVOCS (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	6,600	<4,000	1,400	2,600	1,300	1,300
1,2-Dichlorobenzene	20	NA	NA	13,000	53,000	4,900	6,300	4,600	4,100
1,4-Dichlorobenzene	6	NA	NA	<1,000	<4,000	<400	500	<400	<400
Diethylphthalate	6,000	NA	NA	<1,000	<4,000	<400	<400	<400	<400
Naphthalene	6	NA	NA	<1,000	<4,000	<400	<400	<400	<400

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-6 3/17/1997	MW-6 6/18/1997	MW-6 9/30/1997	MW-6 12/10/1997	MW-6 3/19/1998	MW-6 6/26/1998	MW-6 6/11/1999	MW-6 12/15/1999
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<12,000	<12,000	<12,000	<12,000	<25,000	<25,000	<25,000	<25,000
Carbon Tetrachloride	0.3	<2,500	<2,500	<1,200	<2,500	<5,000	<5,000	790	680
Chloroform	70	<2,500	<2,500	<1,200	<2,500	<5,000	<5,000	1,200	1,300
1,2-Dichlorobenzene	0.6	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<2,500	3,800	2,500	2,900	<5,000	<5,000	2,000	1,400
1,2-Dichloroethane	0.4	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	7	3,300	4,400	2,800	3,100	<5,000	6,200	4,000	3,200
cis-1,2-Dichloroethene	70	<2,500	<2,500	<1,200	<2,500	<5,000	<5,000	970	410
Ethylbenzene	600	<2,500	<2,500	1,800	<2,500	<5,000	<5,000	2,300	2,200
Methylene Chloride	5	21,000	18,000	5,200	6,300	5,800	8,500	3,600	3,800
Tetrachloroethene	0.7	37,000	40,000	24,000	43,000	42,000	98,000	42,000	68,000
Toluene	600	64,000	57,000	53,000	60,000	54,000	64,000	68,000	75,000
1,1,1-Trichloroethane	200	110,000	86,000	96,000	100,000	100,000	78,000	93,000	82,000
Trichloroethene	3	<2,500	<2,500	<1,200	<2,500	<5,000	19,000	1,800	1,400
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	9,200	8,900	9,300	19,000	5,900	22,000	10,000	9,400
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	2,000	1,000	1,600	1,400	860	1,200	2,500	NA
1,2-Dichlorobenzene	20	8,400	3,300	5,200	5,300	3,000	4,900	5,200	NA
1,4-Dichlorobenzene	6	500	290	<400	<400	270	<500	<500	NA
Diethylphthalate	6,000	<200	<250	<400	<400	<200	<500	<500	NA
Naphthalene	6	<200	<250	<400	<400	<200	<500	<500	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-6 6/23/2000	MW-6 6/18/2002	MW-6 6/25/2008	MW-6 6/10/2009	MW-6 6/21/2011	MW-6R 8/25/2011	MW-6R 5/3/2012	MW-6R 6/20/2013	MW-6R 12/10/2013
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	21.73	17.61	18.81	20.65	18.62	19.00	18.41
pH (standard units)	6.5 - 8.5	NR	NR	6.33	5.60	6.07	11.45	6.70	4.78	5.74
Dissolved Oxygen (mg/L)	NE	NR	NR	1.67	1.1	1.77	1.16	1.29	0.00	0.3
Specific Conductance (µS/cm)	NE	NR	NR	745	653	661	1.186	361	427	256
Oxidation-Reduction Potential (mV)	NE	NR	NR	171	96.9	159.8	-124.1	-60.1	246.0	-116.3
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<5000	<25,000	<2500	<5000	<5000	<13000	<500	<2500	<5000
Carbon Tetrachloride	0.3	500	<5,000	<500	<1,000	<200	<500	120	<100	<200
Chloroform	70	1,300	<5,000	<500	<1,000	<200	<500	66	<100	<200
1,2-Dichlorobenzene	0.6	NA	NA	8,500	5900	6,700	5,200 E	430	6,100	
1,4-Dichlorobenzene	6	NA	NA	NA	430	<500	340	<100	540	
1,1-Dichloroethane	6	1,800	<5,000	980	<1,000	<200	<500	39	<100	<200
1,2-Dichloroethane	0.4	NA	NA	<500	<1,000	<200	<500	<20	<100	<200
1,1-Dichloroethene	350	3,000	<5,000	1,900	1,000	260	510	330	200	240
cis-1,2-Dichloroethene	70	670	<5,000	2,700	2,000	250	<500	360	190	1,100
Ethylbenzene	600	2,500	<5,000	2,000	1,100	450	1,800	1,300	<100	1,300
Methylene Chloride	5	5,700	5,800	<2,500	<1,000	<1000	<2500	<100	<500	<1000
Tetrachloroethene	0.7	41,000	65,000	58,000	30,000	25,000	34,000	31,000	8,400	36,000
Toluene	600	69,000	110,000	57,000	23,000	16,000	35,000	26,000	1,500	17,000
1,1,1-Trichloroethane	200	64,000	140,000	59,000	26,000	20,000	33,000	26,000	7,100	15,000
Trichloroethene	3	1,200	<5,000	2,500	1,400	990	1,700	1,200	230	860
Vinyl Chloride	0.03	NA	NA	<500	<1,000	<200	<500	<20	<100	<200
Xylenes (Total)	500	11,000	12,000	9,200	6,900	4,200	8,500	7,100	480	7,600
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	<240	<210	<200	<98	NA
1,2,4-Trichlorobenzene	70	5,400	30,000	2,400	700 J	780 J	<210	560	150 J	NA
1,2-Dichlorobenzene	20	10,000	25,000	9,300	4,100 J	3,500 J	860 J	3,400	450 J	NA
1,4-Dichlorobenzene	6	700	<5,000	<940	<500	250 J	<210	210	50 J	NA
Diethylphthalate	6,000	<250	<5,000	<940	<500	NS	<210	<200	150 J	NA
Naphthalene	6	NA	<5,000	<940	<500	49 J	<210	32	<9.8	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-6R 6/20/2014	MW-6R 12/18/2014	MW-6R 6/24/2015	MW-6R 9/22/2016
<u>Field Parameters</u>					
Temperature (°C)	NE	18.41	16.09	28.30	22.35
pH (standard units)	6.5 - 8.5	5.74	5.27	5.19	5.27
Dissolved Oxygen (mg/L)	NE	0.3	3.62	2.79	0.54
Specific Conductance (µS/cm)	NE	256	379	2	291
Oxidation-Reduction Potential (mV)	NE	-116.3	96	-50.4	82.0
<u>VOCs (USEPA Method 8260B) µg/L</u>					
Acetone	6,000	<2500	<2,000	<1000	<5000
Carbon Tetrachloride	0.3	<100	<200	<100	<500
Chloroform	70	<100	<200	<100	<500
1,2-Dichlorobenzene	0.6	800	7,100	7,800	2,300
1,4-Dichlorobenzene	6	110	490	550	<500
1,1-Dichloroethane	6	350	<200	250	<500
1,2-Dichloroethane	0.4	<100	<200	<100	<500
1,1-Dichloroethene	350	120	<200	170	<500
cis-1,2-Dichloroethene	70	5,500	1,400	4200	7,400
Ethylbenzene	600	150	1,500	1500	<500
Methylene Chloride	5	<500	<1,000	<500	<2,500
Tetrachloroethene	0.7	7,800	35,000	35,000	20,000
Toluene	600	2,500	14,000	18,000	4000
1,1,1-Trichloroethane	200	3,200	10,000	12,000	3600
Trichloroethene	3	190	890	910	880
Vinyl Chloride	0.03	<100	<200	<100	<500
Xylenes (Total)	500	990	7,500	8,500	2,600
<u>SVOCs (USEPA Method 8270C) µg/L</u>					
1,4-Dioxane	3	<190	NA	<960	<2.0
1,2,4-Trichlorobenzene	70	<96	NA	590 J	210
1,2-Dichlorobenzene	20	580 J	NA	3,200 J	880
1,4-Dichlorobenzene	6	<96	NA	<480	98
Diethylphthalate	6,000	<96	NA	<480	<0.98
Naphthalene	6	<19	NA	<120	14

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7S 12/7/1994	MW-7S 3/7/1995	MW-7S 9/6/1995	MW-7S 12/13/1995	MW-7S 3/28/1996	MW-7S 6/25/1996	MW-7S 9/25/1996	MW-7S 12/9/1996	MW-7S 3/17/1997
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<625	<625	<1,250	<3,000	<2,500	<2,500	<1,250	<625	<250
Benzene	1	<50	<50	<50	<120	<100	<100	<50	<25	<10
Carbon Tetrachloride	0.3	<50	<50	<50	<120	<100	<100	<50	<25	<10
Chloroform	70	<50	<50	<50	<120	<100	<100	<50	<25	<10
1,1-Dichloroethane	6	250	150	190	430	560	270	200	150	52
1,2-Dichloroethane	0.4	<50	<50	<50	<120	<100	<100	<50	<25	<10
1,1-Dichloroethene	350	1,200	1,600	900	1,200	1,300	1,000	840	670	420
cis-1,2-Dichloroethene	70	<50	750	<50	<120	750	<100	<50	<25	<10
1,2-Dichloropropane	0.6	<50	<50	<50	<120	<100	<100	<50	<25	<10
Ethylbenzene	600	<50	<50	<50	<120	<100	<100	<50	<25	<10
Methylene Chloride	5	120	72	100	240	400	<100	73	41	29
Tetrachloroethene	0.7	1,300	890	1,100	1,700	1,900	1,500	760	930	490
Toluene	600	<50	<50	<50	<120	<100	<100	<50	28	33
1,1,1-Trichloroethane	200	1,600	1,000	1,300	1,700	2,100	1,700	1,000	1,100	690
Trichloroethene	3	100	89	82	<120	170	120	67	69	50
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<50	<50	<50	140	230	<100	52	60	58
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	20	NA	NA	20	15	22	<10	11	<10	<10
1,4-Dichlorobenzene	6	NA	NA	<10	<10	<10	<10	<10	<10	<10
3-Methylphenol/4-Methylphenol	400/40	NA	NA	<10	<10	<10	<10	<10	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7S 6/18/1997	MW-7S 9/30/1997	MW-7S 12/10/1997	MW-7S 3/19/1998	MW-7S 6/26/1998	MW-7S 6/10/1999	MW-7S 12/16/1999	MW-7S 6/23/2000	MW-7S 6/6/2001
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<120	<120	<125	<125	<1200	<500	<250	<250	<130
Benzene	1	<25	<25	<25	<25	<50	<20	<10	<10	<5
Carbon Tetrachloride	0.3	<25	<25	<25	<25	<50	<20	<10	<10	<5
Chloroform	70	25	<25	<25	<25	<50	33	<10	12	6.4
1,1-Dichloroethane	6	340	140	260	120	100	380	140	100	49
1,2-Dichloroethane	0.4	<25	<25	<25	<25	<50	<20	<10	<10	<5
1,1-Dichloroethene	350	1,300	760	1,100	640	500	1,000	540	600	350
cis-1,2-Dichloroethene	70	<25	<25	<25	<25	<50	130	80	160	79
1,2-Dichloropropane	0.6	<25	<25	<25	<25	<50	<20	<10	<10	<5
Ethylbenzene	600	44	<25	<25	<25	<50	47	12	<10	<5
Methylene Chloride	5	150	33	52	<25	<50	160	<50	<50	<25
Tetrachloroethene	0.7	1,500	860	1,900	910	980	1,700	860	740	450
Toluene	600	170	<25	34	<25	310	35	14	<10	<5
1,1,1-Trichloroethane	200	1,400	1,100	1,700	960	730	1,800	830	570	380
Trichloroethene	3	130	88	170	320	820	1,300	2,000	1,800	860
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	450	140	150	39	350	850	270	81	33
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	<10	<10	<10	<10	NA	NA	<10	<10
1,2-Dichlorobenzene	20	<10	<10	<10	<10	10	NA	NA	<10	<10
1,4-Dichlorobenzene	6	<10	<10	<10	<10	<10	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<10	<10	<10	NA	NA	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7S 6/24/2004	MW-7S 6/8/2005	MW-7S 6/22/2006	MW-7S 4/10/2007	MW-7S 6/23/2008	MW-7S 6/10/2009	MW-7S 6/14/2010	MW-7S 6/21/2011
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	17.72	16.98	18.54	18.03
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	4.20	4.68	4.63	4.37
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	3.53	5.65	1.07	2.81
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	186	170	172	171
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	312.1	190	12.1	102.9
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<25	<125	<25	<25	<25	<125	<50	<50
Benzene	1	<1.0	<5	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0
Carbon Tetrachloride	0.3	<1	<5	<1	<1	<1.0	<5.0	<2.0	<2.0
Chloroform	70	4.4	<5	<1	1.0	<1.0	<5.0	<2.0	<2.0
1,1-Dichloroethane	6	46	31	10	17	1.7	<5.0	5.2	6.2
1,2-Dichloroethane	0.4					<1.0	<5.0	<2.0	<2.0
1,1-Dichloroethene	350	430	200	76	120	300	190	14	16
cis-1,2-Dichloroethene	70	20	12	3.7	5.2	1.2	<5.0	8.2	4.7
1,2-Dichloropropane	0.6	<1	<5	<1	<1	<1.0	<5.0	<2.0	<2.0
Ethylbenzene	600	<1	<5	1.1	<1	<1.0	<5.0	<2.0	<2.0
Methylene Chloride	5	<1	<25	<5	<5	<5.0	<5.0	<10	<10
Tetrachloroethene	0.7	740	360	150	170	170	140	200	310
Toluene	600	<1	<5	6.3	<1	<1.0	<5.0	<2.0	<2.0
1,1,1-Trichloroethane	200	240	140	51	69	30	17	5.5	25
Trichloroethene	3	160	50	21	28	24	25	100	75
Vinyl Chloride	0.03	NA	NA	NA	NA	<1.0	<5.0	<2.0	<2.0
Xylenes (Total)	500	<2	<5	5.2	<2	<2.0	<10	<4.0	<4.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	<9.5	<2.2
1,2,4-Trichlorobenzene	70	<10	<10	<9.8	<10	<9.4	<9.4	<9.5	<1.1
1,2-Dichlorobenzene	20	<10	<10	14	<10	<9.4	<9.4	<9.5	<1.1
1,4-Dichlorobenzene	6	<10	<10	<9.8	<10	<9.4	<9.4	<9.5	<1.1
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<10	<10	<9.4	<9.4	<9.5	<2.2

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7S 6/17/2002	MW-7S 6/25/2003	MW-7S 5/3/2012	MW-7S 6/19/2013	MW-7S 12/10/2013	MW-7S 6/20/2014	MW-7S 12/17/2014	MW-7S 9/22/2016
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	17.97	17.69	17.64	17.19	17.49	23.0
pH (standard units)	6.5 - 8.5	NR	NR	4.81	4.39	4.77	5.95	4.24	4.92
Dissolved Oxygen (mg/L)	NE	NR	NR	0.24	1.62	3.06	2.89	1.22	4.8
Specific Conductance (µS/cm)	NE	NR	NR	376	939	284	188	302	238
Oxidation-Reduction Potential (mV)	NE	NR	NR	189.2	373.0	-45.6	145.1	249	191
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<500	<130	<25	<25	<25	<25	<10	<10
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Tetrachloride	0.3	<25	<5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<25	<5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	78	7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	390	210	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	70	40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<25	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	5	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	660	570	15	3.2	4.7	4.9	3.8	1.7
Toluene	600	<25	<5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	420	310	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	620	230	3.0	<1.0	1.1	1.0	<1.0	<1.0
Vinyl Chloride	0.03	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	85	77	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	<2.1	<1.9	NA	<2.2	NA	<1.9
1,2,4-Trichlorobenzene	70	<10	<10	<1.0	<0.96	NA	<1.1	NA	<0.96
1,2-Dichlorobenzene	20	<10	<10	<1.0	<0.96	NA	<1.1	NA	<0.96
1,4-Dichlorobenzene	6	<10	<10	<1.0	<0.96	NA	<1.1	NA	<0.96
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<2.1	<1.9	NA	<2.2	NA	<1.9

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7M 4/10/2007	MW-7M 5/3/2012	MW-7M 6/19/2013	MW-7M 6/19/2013	MW-7M 6/20/2014	MW-7M 12/17/2014	MW-7M 9/22/2016
<u>Field Parameters</u>								
Temperature (°C)	NE	NR	19.74	19.70	10.11	19.19	16.82	23.05
pH (standard units)	6.5 - 8.5	NR	7.10	6.30	6.16	6.91	6.14	6.41
Dissolved Oxygen (mg/L)	NE	NR	0.13	0.00	6.27	6.70	NA	0.80
Specific Conductance (µS/cm)	NE	NR	152	69	50	315	305	271
Oxidation-Reduction Potential (mV)	NE	NR	-29.4	164.0	-43.1	-62.2	-42	108
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<250	<250	<25	<25	<500	<200	<200
Benzene	1	<10	<1.0	<1.0	<1.0	<20	<20	<20
Carbon Tetrachloride	0.3	<10	<1.0	<1.0	<1.0	<20	<20	<20
Chloroform	70	35	21	<1.0	<1.0	49	45	93
1,2-Dichlorobenzene	20	<10	25	<1.0	<1.0	160	140	190
1,4-Dichlorobenzene	6	<1.0	<1.0	<1.0	<1.0	<20	<20	20
1,1-Dichloroethane	6	91	<1.0	<1.0	<1.0	<20	200	440
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	430	<20	<20
1,1-Dichloroethene	350	540	220 E	2.0	2.3	740	660	1,100
cis-1,2-Dichloroethene	70	35	110	3.6	6.4	2,400	650	580
1,2-Dichloropropane	0.6	<10	<1.0	<1.0	<1.0	<20	<20	<20
Ethylbenzene	600	<10	<1.0	<1.0	<1.0	<20	<20	<20
Methylene Chloride	5	<50	<5.0	<5.0	<5.0	<100	<100	<100
Tetrachloroethylene	0.7	2,900	1,100	96	92	1,200	2,500	5,500
Toluene	600	<10	<1.0	<1.0	<1.0	<20	<20	<20
1,1,1-Trichloroethane	200	110	100	<1.0	1.7	240	250	420
Trichloroethene	3	200	93	2.5	1.9	370	450	540
Vinyl Chloride	0.03	NA	<1.0	<1.0	<1.0	<20	<20	<20
Xylenes (Total)	500	140	57	<2.0	<2.0	440	290	490
<u>SVOCS (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	NA	6.8	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	16	7	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	26	25	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7D 12/7/1994	MW-7D 3/7/1995	MW-7D 9/6/1995	MW-7D 12/13/1995	MW-7D 3/28/1996	MW-7D 12/9/1996	MW-7D 3/17/1997	MW-7D 6/18/1997
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<2,500	<1,200	<1,200	<1,200	<1,200	<600	<1,000	<1,000
Benzene	1	<500	<250	<250	<250	<250	<120	<100	<100
Carbon Tetrachloride	0.3	<500	<250	<250	<250	<250	<120	<100	<100
Chloroform	70	<500	<250	<250	<250	<250	<120	<100	<100
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<500	<250	<250	<250	<250	<120	<100	<100
1,1-Dichloroethene	350	2,400	3,600	1,800	940	1,000	1,300	770	1,000
cis-1,2-Dichloroethene	70	<500	<250	<250	<250	<250	<120	<100	<100
Ethylbenzene	600	<500	<250	<250	<250	<250	<120	<100	<100
Methylene Chloride	5	760	820	480	340	400	260	200	170
Tetrachloroethene	0.7	9,000	6,900	8,400	4,600	5,700	8,100	5,200	6,700
Toluene	600	<500	<250	<250	<250	<250	<120	<100	<100
1,1,1-Trichloroethane	200	880	780	610	270	350	430	320	210
Trichloroethene	3	2,100	1,900	1,700	600	1,100	1,100	930	990
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	630	430	550	370	430	350	260	310
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	130	130	140	130	91	87
1,2-Dichlorobenzene	20	NA	NA	620	450	570	420	300	250
1,3-Dichlorobenzene	200	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	54	48	59	44	<40	35
3-Methylphenol/4-Methylphenol	400/40	NA	NA	<50	<40	<40	NA	<40	<20
Naphthalene	6	NA	NA	<50	<40	<40	<40	<40	<20
Phenol	30	NA	NA	<50	<40	<40	<40	<40	<20

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7D 9/30/1997	MW-7D 12/10/1997	MW-7D 3/19/1998	MW-7D 6/26/1998	MW-7D 6/10/1999	MW-7D 12/16/1999	MW-7D 6/23/2000	MW-7D 6/6/2001
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<1,200	<500	<1,200	<1,200	<1,200	<500	<250	<250
Benzene	1	<250	<100	<250	<250	<50	<20	<10	<10
Carbon Tetrachloride	0.3	<250	<100	<250	<250	<50	<20	<10	<10
Chloroform	70	<250	<100	<250	<250	<50	<20	<10	<10
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<250	<100	<250	<250	<50	<20	<10	11
1,1-Dichloroethene	350	620	700	490	460	280	240	270	200
cis-1,2-Dichloroethene	70	<250	<100	<250	NA	<50	<20	<10	<10
Ethylbenzene	600	<250	<100	<250	NA	<50	<20	<10	<10
Methylene Chloride	5	<250	160	<250	<250	<250	<100	<50	<50
Tetrachloroethene	0.7	5,200	8,100	6,000	6,000	4,400	4,500	2,600	1,700
Toluene	600	<250	<100	<250	<250	<50	<20	<10	<10
1,1,1-Trichloroethane	200	<250	210	<250	<250	<50	92	82	73
Trichloroethene	3	880	980	740	710	530	520	340	230
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<250	630	630	<250	<100	<40	<20	<20
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	100	110	54	72	54	NA	18	47
1,2-Dichlorobenzene	20	220	250	100	180	NA	NA	26	56
1,3-Dichlorobenzene	200	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	28	35	21	22	17	NA	<10	<10
3-Methylphenol/4-Methylphenol	400/40	<20	<20	<10	<20	NA	NA	<10	<10
Naphthalene	6	<20	<20	<10	NA	NA	NA	NA	NA
Phenol	30	<20	<20	<10	NA	NA	NA	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7D 6/17/2002	MW-7D 6/26/2003	MW-7D 6/24/2004	MW-7D 6/8/2005	MW-7D 6/22/2006	MW-7D 4/10/2007	MW-7D 6/24/2008
<u>Field Parameters</u>								
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	19.43
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	6.67
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	0.87
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	197
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	75
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<1,200	<620	<120	<500	<500	<250	<50
Benzene	1	<120	<25	<5	<100	<100	<10	<2.0
Carbon Tetrachloride	0.3	<120	<25	<5	<100	<100	<10	<2.0
Chloroform	70	<120	<25	<5	<100	<100	<10	<2.0
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<120	<25	<5	<100	<100	<10	<2.0
1,1-Dichloroethene	350	<120	<b>82</b>	<b>59</b>	<b>99</b>	<b>150</b>	<b>180</b>	<b>20</b>
cis-1,2-Dichloroethene	70	<120	<25	<5	<100	<100	<10	<b>2.1</b>
Ethylbenzene	600	<120	<25	<5	<100	<100	<10	<2.0
Methylene Chloride	5	<120	<120	<25	<100	<100	<50	<10
Tetrachloroethene	0.7	<b>4,100</b>	<b>2,700</b>	<b>830</b>	<b>1,900</b>	<b>3,500</b>	<b>3,000</b>	<b>520</b>
Toluene	600	<120	<25	<5	<100	<100	<10	<2.0
1,1,1-Trichloroethane	200	<120	<b>41</b>	<b>15</b>	<b>25</b>	<100	<b>30</b>	<b>5.0</b>
Trichloroethene	3	<b>320</b>	<b>160</b>	<b>61</b>	<b>97</b>	<b>170</b>	<b>170</b>	<b>30</b>
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	<2.0
Xylenes (Total)	500	<250	<50	<10	<100	<100	<b>23</b>	<4.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<b>38</b>	<10	<b>22</b>	<b>110</b>	<b>100</b>	<b>82</b>	<b>12</b>
1,2-Dichlorobenzene	20	<b>62</b>	<10	<10	<b>170</b>	<b>160</b>	<b>130</b>	<b>17</b>
1,3-Dichlorobenzene	200	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<b>11</b>	<10	<10	<b>22</b>	<b>20</b>	<b>16</b>	<9.4
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<10	<10	<10	<10	<9.4
Naphthalene	6	NA	NA	NA	NA	NA	<10	<9.4
Phenol	30	<10	<10	<b>20</b>	<10	<9.4	<10	<9.4

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7D 6/10/2009	MW-7D 6/14/2010	MW-7D 6/14/2010	MW-7D 5/2/2012	MW-7D 6/19/2013	MW-7D 6/20/2014	MW-7D 9/22/2016
<u>Field Parameters</u>								
Temperature (°C)	NE	18.41	19.56	18.97	18.67	19.86	19.46	23.56
pH (standard units)	6.5 - 8.5	6.18	5.79	6.23	5.55	5.17	5.39	5.35
Dissolved Oxygen (mg/L)	NE	0.66	0.29	0.49	1.13	0.00	2.39	0.93
Specific Conductance (µS/cm)	NE	84	148	132	93	84	100	106
Oxidation-Reduction Potential (mV)	NE	49.2	-136.3	10.3	6.1	265.0	145.8	149.0
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<50	<50	<50	<630	<630	<1300	<500
Benzene	1	<2.0	<2.0	<2.0	<25	<25	<50	<50
Carbon Tetrachloride	0.3	<10	<2.0	<2.0	<25	<25	<50	<50
Chloroform	70	<10	<2.0	<2.0	<25	<25	<50	<50
1,2-Dichlorobenzene	20	NA	2.5	<2.0	120	56	180	60
1,1-Dichloroethane	6	<10	<2.0	4.3	<25	<25	<50	76
1,1-Dichloroethene	350	11	11	33	<25	150	230	330
cis-1,2-Dichloroethene	70	370	350	140	<25	<25	<50	170
Ethylbenzene	600	<10	<2.0	<2.0	<25	<25	<50	<50
Methylene Chloride	5	<10	<10	<10	<130	<130	<250	<250
Tetrachloroethene	0.7	140	4.7	180	4,200	3,500	5,400	3,000
Toluene	600	<10	<2.0	<2.0	<25	<25	<50	<50
1,1,1-Trichloroethane	200	<10	<2.0	7.4	<25	<25	<50	<50
Trichloroethene	3	120	2.4	57	100	61	88	400
Vinyl Chloride	0.03	<10	<2.0	<2.0	<25	<25	<50	<50
Xylenes (Total)	500	<20	<4.0	<4.0	<50	<50	<100	73
<u>SVOCs (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	NA	<9.7	18	22	21	NA	15
1,2,4-Trichlorobenzene	70	<10	<9.7	34	50	<0.99	NA	34
1,2-Dichlorobenzene	20	<10	<9.7	45	63	9.9	NA	47
1,3-Dichlorobenzene	200	NA	NA	1.6	NA	1.2	NA	1.1
1,4-Dichlorobenzene	6	<10	<9.7	7.4	9.5	5.1	NA	4.4
3-Methylphenol/4-Methylphenol	400/40	<10	<9.7	<2.1	<9.8	<2.0	NA	<1.9
Naphthalene	6	<10	<10	0.60	NA	0.55	NA	6.9
Phenol	30	<10	<10	2.3	NA	2.2	NA	<0.96

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-7BR 6/9/2009	MW-7BR 6/15/2010	MW-7BR 6/21/2010	MW-7BR 5/3/2012	MW-7BR 6/20/2013	MW-7BR 6/20/2014	MW-7BR 9/22/2016
<u>Field Parameters</u>								
Temperature (°C)	NE	21.25	21.21	21.33	20.54	23.4	21.59	20.4
pH (standard units)	6.5 - 8.5	6.51	6.38	6.48	6.59	4.76	7.24	7.0
Dissolved Oxygen (mg/L)	NE	0.55	0.6	0.53	0.14	0	3.14	0.0
Specific Conductance (µS/cm)	NE	278	328	302	1110	2030	1,386	1,641
Oxidation-Reduction Potential (mV)	NE	24.1	50.7	45.6	182.9	21	-249.7	-167
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<50	<1200	66	13,000	<2500	<5000	<200
Benzene	1	<2.0	<50	<2.0	7.9	<100	<200	<200
Chloroform	70	<10	<50	<2.0	22	<100	<200	<200
1,2-Dichlorobenzene	20	<10	<50	<2.0	380	420	1,200	1,700
1,1-Dichloroethane	6	<10	92	8.1	43	<100	290	1,200
1,2-Dichloroethane	0.4	<10	<50	<50	17	<100	<200	<200
1,1-Dichloroethene	350	11	340	40	1,000	970	3,900	920
cis-1,2-Dichloroethene	70	370	220	150	10,000	1,200	30,000	9,700
trans-1,2-Dichloroethene	100	<10	<50	<2.0	160	<100	<200	<200
Ethylbenzene	600	<10	<50	<2.0	240	270	1,000	1,300
Methylene Chloride	5	<10	<250	14	2,100	1,200	<1000	<200
Tetrachloroethene	0.7	140	710	98	1,500	6,500	1,800	640
Toluene	600	<10	<50	16	3,200	4,100	11,000	7,200
1,1,1-Trichloroethane	200	<10	190	<2.0	490	<100	<200	<200
Trichloroethene	3	120	3,800	35	640	6200	2,100	850
Vinyl Chloride	0.03	<10	<50	<2.0	11	<100	2,200	2,400
Xylenes (Total)	500	<20	<100	4.3	840	990	3,500	4,800
<u>SVOCS (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	NA	NA	NA	300	NA	NA	NA
1,2,4-Trichlorobenzene	70	120	NA	NA	94	NA	NA	NA
1,2-Dichlorobenzene	20	84	NA	NA	450	NA	NA	NA
1,4-Dichlorobenzene	6	17	NA	NA	31	NA	NA	NA
2-methylnaphthalene	30	NA	NA	NA	3.5	NA	NA	NA
Naphthalene	6	<9.4	<9.4	NA	17	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-8 12/7/1994	MW-8 3/7/1995	MW-8 9/26/1996	MW-8 12/15/1999	MW-8 4/10/2007	MW-8 12/17/2010
<b>Field Parameters</b>							
Temperature (°C)	NE	NR	NR	NR	NR	NR	16.96
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	7.16
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	1.02
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	320
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	97.8
<b>VOCs (USEPA Method 8260B) µg/L</b>							
Acetone	6,000	<1,200	<1,200	<50	<25	<50	<25
Benzene	1	<250	<250	<5	<1	<2	<1.0
Carbon Tetrachloride	0.3	<250	<250	<5	<1	<2	<1.0
Chloroform	70	<250	<250	<5	<b>1.3</b>	<2	<b>2.2</b>
1,1-Dichloroethane	6	<250	<250	<5	<1	<2	<b>9.5</b>
1,1-Dichloroethene	350	<b>2,600</b>	<b>3,400</b>	<5	<b>2.7</b>	<b>10</b>	<b>68</b>
cis-1,2-Dichloroethene	70	<250	<250	<5	<1	<b>2.8</b>	<1.0
Ethylbenzene	600	<250	<250	<5	<1	<2	<1.0
Methylene Chloride	5	<b>760</b>	<b>760</b>	<5	<5	<10	<5.0
Tetrachloroethene	0.7	<b>8,600</b>	<b>7,100</b>	<5	<b>11</b>	<b>87</b>	<b>160</b>
Toluene	600	<250	<250	<5	<1	<2	<1.0
1,1,1-Trichloroethane	200	<b>930</b>	<b>800</b>	<5	<1	<2	<1.0
Trichloroethene	3	<b>2,000</b>	<b>2,000</b>	<5	<b>14</b>	<b>250</b>	<b>180</b>
Vinyl Chloride	0.03	NA	NA	NA	NA	<2	<1.0
Xylenes (Total)	500	<b>910</b>	<b>490</b>	<10	<2	<4	<2.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>							
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	<9.4	NA
1,2-Dichlorobenzene	20	NA	NA	NA	NA	<9.4	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	<9.4	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA	NA	NA	<9.4	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-8D 9/26/1996	MW-8D 6/25/1998	MW-8D 6/10/1999	MW-8D 12/15/1999	MW-8D 6/22/2000	MW-8D 6/5/2001	MW-8D 6/17/2002	MW-8D 6/25/2003	MW-8D 6/23/2004
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<50	<50	ND	<25	<25	<25	<50	<25	<25
Benzene	1	<5	<5	ND	<1	<1	<1	<5	<1	<1
2-Butanone (MEK)	4,000	<25	<25	ND	<10	<10	<10	<25	<10	<10
Carbon Tetrachloride	0.3	<5	<5	ND	1.2	<1	1.3	<5	2.8	1.3
Chloroform	70	<5	<5	ND	<1	<1	<1	<5	2.0	1.8
1,1-Dichloroethane	6	<5	<5	ND	<1	<1	<1	<5	<1	<1
1,2-Dichloroethane	0.4	<5	<5	NA	NA	<1	<1	<1	<1	1.1
1,1-Dichloroethene	350	<5	<5	ND	<1	<1	<1	<5	1.9	2.0
cis-1,2-Dichloroethene	70	<5	<5	ND	<1	<1	<1	<5	<1	<1
1,2-Dichloropropane	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	600	<5	<5	ND	<1	<1	<1	<5	<1	<1
Methyl Isobutyl Ketone (MIBK)	NE	<25	<25	ND	<10	<10	<10	<25	<10	<10
Methylene Chloride	5	<5	<5	ND	<5	<5	<5	<5	<5	<5
Tetrachloroethene	0.7	<5	<5	1	5.8	5.9	5.7	15	16	16
Toluene	600	<5	<5	ND	<1	<1	<1	<5	<1	<1
1,1,1-Trichloroethane	200	<5	<5	ND	<1	<1	<1	<5	<1	<1
1,1,2-Trichloroethane	NE	<5	<5	ND	<1	<1	<1	<5	<1	<1
Trichloroethene	3	<5	<5	ND	6.7	4.8	7.6	26	28	27
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<5	<5	ND	<2	<2	<2	<10	<2	<2
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	NA	NA	<10	NA
1,2-Dichlorobenzene	24	<10	NA	NA	NA	NA	NA	NA	<10	NA
1,4-Dichlorobenzene	1.4	<10	NA	NA	NA	NA	NA	NA	<10	NA
3-Methylphenol/4-Methylphenol	35/0.35	<10	NA	NA	NA	NA	NA	NA	<10	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-8D 6/7/2005	MW-8D 4/10/2007	MW-8D 6/24/2008	MW-8D 6/9/2009	MW-8D 6/14/2010	MW-8D 6/20/2011	MW-8D 4/30/2012	MW-8D 6/18/2013
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	17.95	20.43	19.60	19.33	18.73	19.26
pH (standard units)	6.5 - 8.5	NR	NR	5.86	5.64	5.39	5.76	5.83	5.47
Dissolved Oxygen (mg/L)	NE	NR	NR	7.23	13.01	2.25	5.93	5.47	4.81
Specific Conductance (µS/cm)	NE	NR	NR	57	46	49	48	51	50
Oxidation-Reduction Potential (mV)	NE	NR	NR	225	104.8	-17.8	198.7	167.8	317.0
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<10	<10	<10	<25	<10	<10	<10	<10
Carbon Tetrachloride	0.3	1.7	3.1	3.1	<5.0	3.8	<1.0	3.8	4.6
Chloroform	70	2.5	4.9	5.3	5.5	9.1	1.7 UB	14	15
1,1-Dichloroethane	6	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	0.4	<1	<1	<1.0	<5.0	<1.0	<1.0	1.2	1.2
1,1-Dichloroethene	350	2.8	3.3	5.7	<5.0	2.5	<1.0	3.1	4.9
cis-1,2-Dichloroethene	70	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.6	NA	NA	3.3	<5.0	4.1	2.0	5.0	3.4
Ethylbenzene	600	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10	<10	<5.0	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	22	29	44	32	33	1.5	40	48
Toluene	600	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	NE	<1	<1	1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	39	64	87	74	86	5.8	120	130
Vinyl Chloride	0.03	NA	NA	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<2	<2	<2.0	<10	<2.0	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	NA	<10	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	<10	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	<10	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	40	NA	<10	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location:	NCAC 2L	MW-9 6/25/1998	MW-9 6/10/1999	MW-9 12/16/1999	MW-9 6/22/2000	MW-9 6/6/2001	MW-9 6/18/2002	MW-9 6/26/2003	MW-9 6/24/2004	MW-9 6/8/2005
Date Sampled:	Standard									
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	NA	22,000	9,600	10,000	8,700	22,000	920	<500	<250
Benzene	1	NA	57	50	54	<40	<620	46	<20	11
2-Butanone (MEK)	4,000	660	9,100	3,800	5,400	2,800	8,100	410	<20	<10
Carbon Disulfide	700	NA	91	NA	87	NA	NA	NA	NA	NA
Carbon Tetrachloride	0.3	NA	87	43	60	<40	<620	<25	<20	<10
Chloroform	70	230	720	530	660	240	<620	280	78	34
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	600	1,300	1,200	1,400	850	1,700	1,100	430	360
1,2-Dichloroethane	0.4									
1,1-Dichloroethylene	350	950	2,200	1,900	2,600	1,400	2,400	1,700	710	550
cis-1,2-Dichloroethylene	70	1,900	3,000	3,500	4,000	2,500	4,100	3,800	1,600	1,400
Ethylbenzene	600	NA	340	170	350	120	<620	160	<20	<10
Methylene Chloride	5	140	1,700	800	1,500	400	1,200	120	<20	<50
Tetrachloroethylene	0.7	720	2,600	1,900	2,800	740	2,000	840	300	140
Toluene	600	720	8,300	2,900	5,800	2,300	7,200	2,200	100	10
1,1,1-Trichloroethane	200	150	470	360	410	140	<620	130	32	18
Trichloroethylene	3	190	840	570	690	220	<620	320	110	59
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	700	1,800	1,200	1,900	780	<1,600	1,100	200	120
<u>SVOCS(USEPA Method 8270C) µg/L</u>										
1,2,4-Trichlorobenzene	70	110	NA	NA	420	<50	320	82	<200	NA
1,2-Dichlorobenzene	20	210	NA	NA	880	690	830	180	430	NA
1,4-Dichlorobenzene	6	<40	NA	NA	74	53	60	20	<200	NA
3-Methylphenol/4-Methylphenol	400/40	<40	NA	NA	<50	<50	<50	<10	<200	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-9 6/21/2006	MW-9 4/10/2007	MW-9 6/23/2008	MW-9 6/9/2009	MW-9 6/14/2010	MW-9 12/17/2010	MW-9 6/20/2011	MW-9 5/1/2012	MW-9 6/19/2013
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	19.50	19.07	18.95	16.79	18.65	18.93	27.21
pH (standard units)	6.5 - 8.5	NR	NR	5.24	5.58	5.24	6.93	6.21	5.49	5.19
Dissolved Oxygen (mg/L)	NE	NR	NR	0.61	1.43	0.10	2.71	0.84	1.35	0.00
Specific Conductance (µS/cm)	NE	NR	NR	245	256	264	215	239	225	181
Oxidation-Reduction Potential (mV)	NE	NR	NR	132.9	88.4	-83.3	174.5	22.7	-30.4	172.0
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<500	<25	<1,200	<500	<1,200	<1,200	<1300	<1300	<1300
Benzene	1	<20	21	<50	29	<50	<50	<50	<50	<50
2-Butanone (MEK)	4,000	<20	<10	<500	<500	<500	<500	<500	<500	<500
Carbon Disulfide	700	NA	<2	<100	<100	<100	<100	<100	<100	<100
Carbon Tetrachloride	0.3	<20	<1	<50	<100	<50	<50	<50	<50	<50
Chloroform	70	52	17	<50	<100	<50	<50	<50	<50	<50
1,2-Dichlorobenzene	20	NA	NA	NA	970	580	680	410	250	
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	77	61	NA	
1,1-Dichloroethane	6	510	600	890	880	1,100	830	660	660	440
1,2-Dichloroethane	0.4		<50	<100	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	350	790	1,400	1,800	1,800	2,500	1,900	1,600	<50	1,000
cis-1,2-Dichloroethene	70	2,100	3,200	4,100	4,100	6,000	4,900	3,800	3,900	2,700
Ethylbenzene	600	<20	<1	<50	<100	<50	<50	<50	<50	<50
Methylene Chloride	5	<100	<5	<250	<100	<250	<250	<500	<250	<250
Tetrachloroethylene	0.7	220	120	490	730	660	370	480	520	580
Toluene	600	<20	7.1	<50	<100	<50	<50	<50	<50	<50
1,1,1-Trichloroethane	200	34	<1	<50	<100	<50	<50	<50	<50	<50
Trichloroethylene	3	110	73	260	230	190	140	170	210	210
Vinyl Chloride	0.03	NA	3.6	<50	<100	<50	<50	<50	<50	<50
Xylenes (Total)	500	190	270	420	480	640	400	500	300	150
<u>SVOCS(USEPA Method 8270C) µg/L</u>										
1,2,4-Trichlorobenzene	70	73	39	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	230	160	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<49	15	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	<10	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-10 12/16/1999	MW-10 12/17/2010
<u>Field Parameters</u>			
Temperature (°C)	NE	NR	16.93
pH (standard units)	6.5 - 8.5	NR	6.04
Dissolved Oxygen (mg/L)	NE	NR	0.39
Specific Conductance (µS/cm)	NE	NR	493
Oxidation-Reduction Potential (mV)	NE	NR	112.3
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<12,000	<1200
Benzene	1	<500	<50
2-Butanone (MEK)	4,000	<5,000	<500
Carbon Tetrachloride	0.3	2,700	160
Chloroform	70	<500	98
1,2-Dichlorobenzene	20	NA	1,200
1,1-Dichloroethane	6	NA	58
1,1-Dichloroethene	350	1,700	590
cis-1,2-Dichloroethene	70	1,100	450
Ethylbenzene	600	7,500	730
Methyl Isobutyl Ketone (MIBK)	NE	<5,000	<500
Methylene Chloride	5	<2,500	<250
Tetrachloroethene	0.7	22,000	6,900
Toluene	600	58,000	6,700
1,1,1-Trichloroethane	200	40,000	5,100
Trichloroethene	3	1,500	860
Vinyl Chloride	0.03	NA	<50
Xylenes (Total)	500	35,000	3,700
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,2,4-Trichlorobenzene	70	NA	NA
1,2-Dichlorobenzene	20	NA	NA
1,4-Dichlorobenzene	6	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11 9/25/1996	MW-11 6/25/1998	MW-11 12/23/1998	MW-11 6/10/1999	MW-11 12/14/1999	MW-11 6/22/2000	MW-11 12/18/2000	MW-11 6/6/2001	MW-11 12/13/2001
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<5,000	NA	NA	ND	<2,500	<2,500	NA	<2,500	<2,500
Benzene	1	<500	NA	NA	ND	<100	120	110	<100	<100
Carbon Tetrachloride	0.3	<500	NA	NA	ND	<100	<100	NA	<100	<100
Chloroform	70	<500	<500	NA	ND	<100	<100	6.1	<100	<100
1,1-Dichloroethane	6	<500	<500	<250	ND	<100	<100	100	100	130
1,1-Dichloroethene	350	1,600	1,600	1,700	1,500	1,700	1,900	1,400	1,600	2,200
cis-1,2-Dichloroethene	70	4,300	10,000	9,400	10,000	10,000	13,000	9,300	11,000	14,000
trans-1,2-Dichloroethene	100	<500	NA	NA	NA	NA	NA	51	NA	NA
Ethylbenzene	600	<500	NA	NA	ND	<100	<100	NA	<100	<100
Methylene Chloride	5	13,000	2,000	3,000	2,100	2,200	1,400	1,100	<500	500
Tetrachloroethene	0.7	3,800	2,100	2,700	1,900	2,400	25,000	1,800	1,500	1,400
Toluene	600	<500	<500	NA	ND	<100	<100	1.9	<100	<100
1,1,1-Trichloroethane	200	<500	<500	<250	ND	260	220	200	200	160
Trichloroethene	3	13,000	6,800	6,000	5,300	5,200	5,300	3,600	3,400	3,400
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<500	<500	NA	ND	<200	<200	54	<200	<200
<u>SVOCS (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	<10	<10	NA	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	20	53	18	17	NA	22	13	14	<10	13
1,4-Dichlorobenzene	6	<10	<10	<10	NA	<10	<10	<10	<10	<10
3-Methylphenol/4-Methylphenol	400/40	<10	<10	NA	NA	NA	<10	NA	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11 6/18/2002	MW-11 12/4/2002	MW-11 6/25/2003	MW-11 12/11/2003	MW-11 6/23/2004	MW-11 12/15/2004	MW-11 6/8/2005	MW-11 12/12/2005	MW-11 6/21/2006
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<5,000	<2,500	<2,500	<2,500	<2,500	<5,000	<2,500	<5,000	<5,000
Benzene	1	<500	<100	<100	<100	<100	<200	<100	<200	<200
Carbon Tetrachloride	0.3	<500	<100	<100	<100	<100	<200	<100	<200	<200
Chloroform	70	<500	<100	<100	<100	<100	<200	<100	<200	<200
1,1-Dichloroethane	6	<500	100	120	110	130	<200	100	<200	<200
1,1-Dichloroethene	350	1,700	2,200	1,900	1,900	2,400	2,300	2,200	1,900	2,400
cis-1,2-Dichloroethene	70	14,000	13,000	16,000	15,000	19,000	16,000	14,000	13,000	16,000
trans-1,2-Dichloroethene	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	600	<500	<100	<100	<100	<100	<200	<100	<200	<200
Methylene Chloride	5	<500	500	<500	<500	<500	<1,000	<500	<1,000	<1,000
Tetrachloroethene	0.7	1,900	2,200	2,000	1,400	2,400	1,400	1,500	1,400	2,000
Toluene	600	<500	<100	<100	<100	<100	<200	<100	<200	<200
1,1,1-Trichloroethane	200	<500	230	140	<100	<100	<200	<100	<200	260
Trichloroethene	3	4,400	4,000	3,800	2,500	2,800	2,300	2,300	2,400	3,500
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	<200	
Xylenes (Total)	500	<500	<200	<200	<200	<200	<400	<200	<400	<400
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	<10	<10	<10	<50	<10	<9.8	<9.4	<9.6
1,2-Dichlorobenzene	20	<10	<10	<10	<10	<50	<10	<9.8	<9.4	<9.6
1,4-Dichlorobenzene	6	<10	<10	<10	<10	<50	<10	<9.8	<9.4	<9.6
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<10	<10	<50	<10	NA	<9.4	<9.6

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11 6/23/2008	MW-11 12/8/2008	MW-11 6/10/2009	MW-11 12/29/2009	MW-11 6/14/2010	MW-11 12/17/2010	MW-11 6/21/2011	MW-11 12/13/2011	MW-11 5/1/2012
<u>Field Parameters</u>										
Temperature (°C)	NE	20.00	16.12	18.79	17.75	19.07	16.98	18.81	19.16	18.88
pH (standard units)	6.5 - 8.5	4.58	3.86	4.53	4.18	3.65	6.07	5.14	3.82	4.32
Dissolved Oxygen (mg/L)	NE	2.92	1.96	8.29	2.67	1.41	2.00	2.26	3.78	3.76
Specific Conductance (µS/cm)	NE	491	435	405	467	453	202	418	742	450
Oxidation-Reduction Potential (mV)	NE	254	245	183.3	201	167	195.4	191.8	361.0	168.2
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<5,000	<2,500	<1,200	<2,500	<2,500	<25,000	<2500	<2500	<2500
Benzene	1	<200	<100	<50	<100	<100	<100	<100	<100	<100
Carbon Tetrachloride	0.3	<200	<100	<250	<500	<100	<100	<100	<100	<100
Chloroform	70	<200	<100	<250	<500	<100	<100	<100	<100	<100
1,1-Dichloroethane	6	<200	<100	<250	<500	<100	100	<100	<100	<100
1,1-Dichloroethene	350	2,800	2,000	2,300	1,700	2,500	2,600	730	2,100	2,600
cis-1,2-Dichloroethene	70	16,000	14,000	14,000	9,700	15,000	16,000	5,700	11,000	13,000
trans-1,2-Dichloroethene	100	<200	<100	<250	<500	<100	<100	<100	<100	<100
Ethylbenzene	600	<200	<100	<250	<500	<100	<100	<100	<100	<100
Methylene Chloride	5	<1,000	<500	<250	<500	<500	<500	<500	<500	<500
Tetrachloroethene	0.7	3,300	2,500	2,900	1,800	3,600	3,600	1,000	4,100	5,600
Toluene	600	<200	<100	<250	<500	<100	<100	<100	<100	<100
1,1,1-Trichloroethane	200	220	170	<250	<500	110	130	<100	170	190
Trichloroethene	3	4,800	3,900	4,100	3,000	5,500	6,300	1,800	7,900	9,200
Vinyl Chloride	0.03	<200	<100	<250	<500	<100	<100	<100	<100	<100
Xylenes (Total)	500	<400	<200	<500	<1,000	<200	<200	<200	<200	<100
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	380	NA	170 J	NA	210
1,2,4-Trichlorobenzene	70	<9.4	NA	<9.4	NA	<97	NA	<12	NA	<10
1,2-Dichlorobenzene	20	<9.4	NA	<9.4	NA	<97	NA	<12	NA	<10
1,4-Dichlorobenzene	6	<9.4	NA	<9.4	NA	<97	NA	<12	NA	<10
3-Methylphenol/4-Methylphenol	400/40	<9.4	NA	<9.4	NA	<97	NA	<24	NA	<20

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11 12/13/2012	MW-11 6/19/2013	MW-11 6/20/2014	MW-11 6/24/2015	MW-11 9/22/2016
<u>Field Parameters</u>						
Temperature (°C)	NE	18.57	23.69	18.44	30.96	20.3
pH (standard units)	6.5 - 8.5	4.09	3.90	5.13	4.18	4.06
Dissolved Oxygen (mg/L)	NE	1.59	3.55	12.48	6.24	2.6
Specific Conductance (µS/cm)	NE	451	457	420	343	400
Oxidation-Reduction Potential (mV)	NE	310.0	513.0	204.8	462.6	567
<u>VOCs (USEPA Method 8260B) µg/L</u>						
Acetone	6,000	<2500	<2500	<5000	< 2000	<2000
Benzene	1	<100	<100	<200	< 200	<200
Carbon Tetrachloride	0.3	<100	<100	<200	< 200	<200
Chloroform	70	<100	<100	<200	< 200	<200
1,1-Dichloroethane	6	<100	<100	<200	< 200	<200
1,1-Dichloroethene	350	2,300	2,300	2,200	1900	2,200
cis-1,2-Dichloroethene	70	9,900	11,000	9,700	6700	7,400
trans-1,2-Dichloroethene	100	<100	<100	<200	< 200	<200
Ethylbenzene	600	<100	<100	<200	< 200	<200
Methylene Chloride	5	<500	<500	<1000	< 1000	<1000
Tetrachloroethene	0.7	6,400	6,100	5,600	5300	5,700
Toluene	600	<100	<100	<200	< 200	<200
1,1,1-Trichloroethane	200	160	500	<200	< 200	<200
Trichloroethene	3	11,000	11,000	9,700	9400	12,000
Vinyl Chloride	0.03	<100	<100	<200	< 200	<200
Xylenes (Total)	500	<100	<200	<400	< 200	<200
<u>SVOCs (USEPA Method 8270C) µg/L</u>						
1,4-Dioxane	3	NA	260 J	NA	NA	280
1,2,4-Trichlorobenzene	70	NA	<52	NA	NA	1.6
1,2-Dichlorobenzene	20	NA	<52	NA	NA	2.6
1,4-Dichlorobenzene	6	NA	<52	NA	NA	3.1
3-Methylphenol/4-Methylphenol	400/40	NA	<100	NA	NA	<1.9

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11D 7/10/2012	MW-11D 6/20/2013
<b>Field Parameters</b>			
Temperature (°C)	NE	20.58	23.38
pH (standard units)	6.5 - 8.5	5.97	6.12
Dissolved Oxygen (mg/L)	NE	5.50	3.93
Specific Conductance (µS/cm)	NE	208	226
Oxidation-Reduction Potential (mV)	NE	-26.0	120
<b>VOCs (USEPA Method 8260B) µg/L</b>			
Acetone	6,000	<50	<50
Carbon Tetrachloride	0.3	<2.0	<2.0
Chloroform	70	<b>9.2</b>	<b>8.0</b>
1,2-Dichlorobenzene	20	<2.0	<2.0
1,1-Dichloroethane	6	<2.0	<2.0
1,2-Dichloroethane	0.4	<2.0	<2.0
1,1-Dichloroethene	350	<b>5.4</b>	<b>7.2</b>
cis-1,2-Dichloroethene	70	<2.0	<2.0
1,2-Dichloropropane	0.6	<2.0	<2.0
Ethylbenzene	600	<2.0	<2.0
Methylene Chloride	5	<10	<10
Tetrachloroethene	0.7	<b>220</b>	<b>400</b>
Toluene	600	<2.0	<2.0
1,1,1-Trichloroethane	200	<b>2.2</b>	<b>8.6</b>
Trichloroethene	3	<b>16</b>	<b>26</b>
Vinyl Chloride	0.03	<2.0	<2.0
Xylenes (Total)	500	<4.0	<4.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>			
1,4-Dioxane	3	<1.9	NA
1,2,4-Trichlorobenzene	70	<0.96	NA
1,2-Dichlorobenzene	20	<0.96	NA
1,4-Dichlorobenzene	6	<0.96	NA
2-Methylnaphthalene	30	<0.19	NA
3-Methylphenol/4-Methylphenol	400/40	<1.9	NA
Di-n-butylphthalate	700	<0.96	NA
Naphthalene	6	<0.19	NA
Phenol	30	<0.96	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-11BR * 6/20/2013	MW-11BR 6/20/2013
<b>Field Parameters</b>			
Temperature (°C)	NE	NM	21.13
pH (standard units)	6.5 - 8.5	NM	6.54
Dissolved Oxygen (mg/L)	NE	NM	2.1
Specific Conductance (µS/cm)	NE	NM	311
Oxidation-Reduction Potential (mV)	NE	NM	51
<b>VOCs (USEPA Method 8260B) µg/L</b>			
Acetone	6,000	<250	<250
Carbon Tetrachloride	0.3	<10	<10
Chloroform	70	<b>11</b>	<10
1,2-Dichlorobenzene	20	<10	<10
1,1-Dichloroethane	6	<10	<10
1,2-Dichloroethane	0.4	<10	<10
1,1-Dichloroethene	350	<b>71</b>	<b>73</b>
cis-1,2-Dichloroethene	70	<b>130</b>	<b>89</b>
1,2-Dichloropropane	0.6	<10	<10
Ethylbenzene	600	<10	<10
Methylene Chloride	5	<50	<50
Tetrachloroethene	0.7	<b>880</b>	<b>990</b>
Toluene	600	<10	<10
1,1,1-Trichloroethane	200	<10	<10
Trichloroethene	3	<b>450</b>	<b>650</b>
Vinyl Chloride	0.03	<10	<10
Xylenes (Total)	500	<20	<20
<b>SVOCs (USEPA Method 8270C) µg/L</b>			
1,4-Dioxane	3	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA
1,2-Dichlorobenzene	20	NA	NA
1,4-Dichlorobenzene	6	NA	NA
2-Methylnaphthalene	30	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA
Diethylphthalate	6,000	NA	NA
Di-n-butylphthalate	700	NA	NA
Naphthalene	6	NA	NA
Phenol	30	NA	NA

Notes:

\* Groundwater sample was collected from a depth interval of 147 to 154 ft bgs in the open boring prior to well installation  
Additional notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12 9/26/1996	MW-12 12/16/1999	MW-12 4/10/2007	MW-12 6/25/2008	MW-12 6/14/2010	MW-12 6/20/2011	MW-12 4/30/2012	MW-12 6/19/2013	MW-12 12/9/2013
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	21.35	20.11	17.29	19.78	21.08	17.79
pH (standard units)	6.5 - 8.5	NR	NR	NR	6.91	5.01	4.05	4.67	5.17	5.10
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	6.31	2.88	1.95	7.19	5.40	7.44
Specific Conductance (µS/cm)	NE	NR	NR	NR	65	63	289	67	72	668
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	211	2.2	191.9	259.5	312.0	-33.6
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<50	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	1	<5	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Tetrachloride	0.3	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	0.4	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<1	<1	7.3	<1.0	<1.0	<1.0	<1.0	<1.0	1.8
cis-1,2-Dichloroethene	70	<1	<1	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	<5	<1	130	9.5	18	11	13	12	20
Toluene	600	<5	<1	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<5	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	<5	<1	66	7.9	10	17	22	24	33
Vinyl Chloride	0.03	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<10	<2	<2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,2,4-Trichlorobenzene	70	<10	NA	<10	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	<10	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	<10	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	<10	NA	<10	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12 6/19/2014	MW-12 12/19/2014	MW-12 6/24/2015	MW-12 12/10/2015	MW-12 9/22/2016
<u>Field Parameters</u>						
Temperature (°C)	NE	19.34	16.87	21.20	20.69	22.8
pH (standard units)	6.5 - 8.5	5.29	4.93	5.63	6.70	5.30
Dissolved Oxygen (mg/L)	NE	12.02	9.16	5.87	0.92	4.4
Specific Conductance (µS/cm)	NE	78	72	77	143	55
Oxidation-Reduction Potential (mV)	NE	131.0	193	194	88.5	268
<u>VOCs (USEPA Method 8260B) µg/L</u>						
Acetone	6,000	<25	<10	<10	<10	<10
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<b>1.4</b>	<b>1.9</b>	<b>1.4</b>	<1.0	<1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	<b>17</b>	<b>18</b>	<b>13</b>	<b>160</b>	<b>9.3</b>
Toluene	600	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	<b>37</b>	<b>47</b>	<b>32</b>	<b>4.5</b>	<b>21</b>
Vinyl Chloride	0.03	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<2.0	<2.0	<1.0	<1.0	<1.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>						
1,2,4-Trichlorobenzene	70	<1.1	NA	<9.5	NA	NA
1,2-Dichlorobenzene	20	<1.1	NA	<9.5	NA	NA
1,4-Dichlorobenzene	6	<1.1	NA	<9.5	NA	NA
3-Methylphenol/4-Methylphenol	400/40	<2.2	NA	<9.5	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12D 9/26/1996	MW-12D 6/25/1998	MW-12D 1/15/1999	MW-12D 6/10/1999	MW-12D 12/16/1999	MW-12D 6/21/2000	MW-12D 12/19/2000	MW-12D 6/5/2001	MW-12D 12/13/2001	MW-12D 6/17/2002
<u>Field Parameters</u>											
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>											
Acetone	6,000	<50	<50	<100	<25	<25	<25	NA	<25	<25	<100
Benzene	1	<5	<5	<10	<1	<1	<1	<1	<1	<1	<10
Carbon Tetrachloride	0.3	<5	<5	<10	<1	<1	<1	NA	<1	<1	<10
Chloroform	70	<5	<5	<10	2	2.3	1.9	2	2.3	1.9	<10
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	350	8.5	5.8	10	7.6	11	8.6	10	13	12	<10
cis-1,2-Dichloroethene	70	<5	<5	<10	<1	<1	<1	<1	<1	<1	<10
Ethylbenzene	600	<5	<5	<10	<1	<1	<1	NA	<1	<1	<10
Methylene Chloride	5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<10
Tetrachloroethene	0.7	120	100	180	110	170	150	170	180	180	160
Toluene	600	<5	<5	NA	ND	<1	<1	<1	<1	<1	<10
1,1,1-Trichloroethane	200	<5	<5	<10	<1	<1	<1	<1	<1	<1	<10
Trichloroethene	3	12	18	50	49	86	77	96	130	140	130
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<5	<5	NA	ND	<2	<2	<2	<2	<2	<10
<u>SVOCs (USEPA Method 8270C) µg/L</u>											
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	20	<10	<10	NA	NA	NA	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	6	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
3-Methylphenol/4-Methylphenol	400/40	<10	<10	NA	NA	NA	<10	NA	<10	<10	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12D 12/4/2002	MW-12D 6/25/2003	MW-12D 12/10/2003	MW-12D 6/23/2004	MW-12D 12/15/2004	MW-12D 6/7/2005	MW-12D 12/12/2005	MW-12D 6/21/2006	MW-12D 12/7/2006	MW-12D 4/10/2007
<u>Field Parameters</u>											
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>											
Acetone	6,000	<50	<25	<25	<25	<25	<4	<130	<130	<250	
Benzene	1	<2	<1	<1	<1	<1	<4	<5	<5	<10	
Carbon Tetrachloride	0.3	<2	<1	<1	<1	<1	<4	<5	<5	<10	
Chloroform	70	<b>2.3</b>	<b>1.6</b>	<1	<b>2.2</b>	<1	<1	<4	<5	<5	<10
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	350	<b>11</b>	<b>9.5</b>	<b>3.8</b>	<b>16</b>	<b>8.1</b>	<1	<4	<b>35</b>	<b>66</b>	<b>120</b>
cis-1,2-Dichloroethene	70	<2	<1	<1	<b>1.8</b>	<b>44</b>	<1	<b>14</b>	<b>9.7</b>	<b>13</b>	<10
Ethylbenzene	600	<2	<1	<1	<1	<1	<4	<5	<5	<5	<10
Methylene Chloride	5	<10	<5	<5	<5	<5	<4	<25	<25	<50	
Tetrachloroethene	0.7	<b>200</b>	<b>150</b>	<b>52</b>	<b>250</b>	<b>72</b>	<b>4.8</b>	<b>140</b>	<b>290</b>	<b>320</b>	<b>770</b>
Toluene	600	<2	<1	<1	<1	<1	<4	<5	<5	<5	11
1,1,1-Trichloroethane	200	<2	<1	<1	<1	<1	<4	<5	<b>380</b>	<10	
Trichloroethene	3	<b>170</b>	<b>180</b>	<b>70</b>	<b>320</b>	<b>110</b>	<b>8.8</b>	<b>360</b>	<b>740</b>	<b>930</b>	<b>440</b>
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	<5	<5	<10	
Xylenes (Total)	500	<2	<2	<2	<2	<2	<4	<10	<10	<20	
<u>SVOCs (USEPA Method 8270C) µg/L</u>											
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	<10	<10	<10	<10	<9.3	<9.4	<9.3	<9.7	<10
1,2-Dichlorobenzene	20	<10	<10	<10	<10	<10	<9.3	<9.4	<9.3	<9.7	<10
1,4-Dichlorobenzene	6	<10	<10	<10	<10	<10	<9.3	<9.4	<9.3	<9.7	<10
3-Methylphenol/4-Methylphenol	400/40	<10	<10	<10	<10	<10	NA	<9.4	NA	<9.7	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12D 12/13/2007	MW-12D 6/25/2008	MW-12D 12/8/2008	MW-12D 6/9/2009	MW-12D 12/29/2009	MW-12D 6/14/2010	MW-12D 12/17/2010	MW-12D 6/20/2011	MW-12D 12/13/2011	MW-12D 4/30/2012
<u>Field Parameters</u>											
Temperature (°C)	NE	19.35	20.55	13.50	22.05	17.87	21.51	17.43	19.16	18.85	19.88
pH (standard units)	6.5 - 8.5	6.86	8.22	5.99	6.38	6.65	6.44	6.43	7.13	9.49	9.32
Dissolved Oxygen (mg/L)	NE	3.48	1.32	3.39	3.73	4.28	0.61	1.51	3.24	3.14	2.18
Specific Conductance (µS/cm)	NE	216	110	113	98	124	104	592	125	259	173
Oxidation-Reduction Potential (mV)	NE	44	150	115	77.2	81	-65.4	201.4	73.7	46	149.4
<u>VOCs (USEPA Method 8260B) µg/L</u>											
Acetone	6,000	<130	<50	<120	<120	<120	<25	<130	<130	<500	
Benzene	1	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<20
Carbon Tetrachloride	0.3	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	<5.0	<20
Chloroform	70	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	2.2	<20
1,2-Dichlorobenzene	20	NA	NA	NA	<25	<5.0	<1.0	<5.0	<1.0	<1.0	<20
1,1-Dichloroethene	350	51	21	21	25	39	34	<1.0	76 J	49	69
cis-1,2-Dichloroethene	70	13	7.4	13	<25	<25	20	<1.0	42 J	31	50
Ethylbenzene	600	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	<1.0	<20
Methylene Chloride	5	<25	<10	<25	<25	<25	<5.0	<25	<5.0	<5.0	<100
Tetrachloroethene	0.7	340	190	140	170	220	250	6.8	330	230	280
Toluene	600	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	<1.0	<20
1,1,1-Trichloroethane	200	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	<1.0	<20
Trichloroethene	3	1,100	500	470	520	780	870	7.7	1,500 J	970	1,200
Vinyl Chloride	0.03	<5.0	<2.0	<5.0	<25	<25	<5.0	<1.0	<5.0	<1.0	<20
Xylenes (Total)	500	<10	<4.0	<10	<50	<50	<10	<2.0	<10	<2.0	<40
<u>SVOCs (USEPA Method 8270C) µg/L</u>											
1,4-Dioxane	3	NA	NA	NA	NA	NA	53	NA	120 J	NA	61
1,2,4-Trichlorobenzene	70	NA	<9.4	NA	<9.4	NA	<9.5	NA	<11	NA	<10
1,2-Dichlorobenzene	20	NA	<9.4	NA	<9.4	NA	<9.5	NA	<11	NA	<10
1,4-Dichlorobenzene	6	NA	<9.4	NA	<9.4	NA	<9.5	NA	<11	NA	<10
3-Methylphenol/4-Methylphenol	400/40	NA	<9.4	NA	<19	NA	<9.5	NA	<23	NA	<21

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-12D 12/12/2012	MW-12D 6/19/2013	MW-12D 6/19/2014	MW-12D 6/24/2015	MW-12D 9/22/2016
<u>Field Parameters</u>						
Temperature (°C)	NE	19.93	22.37	19.89	24.60	21.4
pH (standard units)	6.5 - 8.5	6.74	6.68	6.18	6.60	6.33
Dissolved Oxygen (mg/L)	NE	1.40	4.19	10.01	3.84	3.7
Specific Conductance (µS/cm)	NE	214	211	220	236	183
Oxidation-Reduction Potential (mV)	NE	122	237	149.1	108.2	198
<u>VOCs (USEPA Method 8260B) µg/L</u>						
Acetone	6,000	<500	<500	<1300	< 500	<500
Benzene	1	<20	<20	<50	< 50	<50
Carbon Tetrachloride	0.3	<20	<20	<50	< 50	<50
Chloroform	70	<20	<20	<50	< 50	<50
1,2-Dichlorobenzene	20	<20	<20	<50	< 50	<50
1,1-Dichloroethene	350	130	110	160	230	280
cis-1,2-Dichloroethene	70	99	110	160	230	350
Ethylbenzene	600	<20	<20	<50	< 50	<50
Methylene Chloride	5	<100	<100	<220	< 250	<250
Tetrachloroethene	0.7	600	490	650	620	880
Toluene	600	<20	<20	<50	< 50	<50
1,1,1-Trichloroethane	200	<20	<20	<50	< 50	<50
Trichloroethene	3	3,100	2,600	2,800	3,500	5,100
Vinyl Chloride	0.03	<20	<20	<50	< 50	<50
Xylenes (Total)	500	<40	<40	<100	< 50	<50
<u>SVOCs (USEPA Method 8270C) µg/L</u>						
1,4-Dioxane	3	NA	410 J	410 J	390 J	530
1,2,4-Trichlorobenzene	70	NA	<50	<50	< 95	<0.96
1,2-Dichlorobenzene	20	NA	<50	<50	< 95	1.5
1,4-Dichlorobenzene	6	NA	<50	<50	< 95	<0.19
3-Methylphenol/4-Methylphenol	400/40	NA	<99	<99	< 95	<1.9

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-13 6/25/1998	MW-13 6/10/1999	MW-13 12/15/1999	MW-13 6/21/2000	MW-13 6/5/2001	MW-13 6/25/2003	MW-13 6/23/2004	MW-13 6/7/2005	MW-13 6/21/2006	MW-13 4/9/2007	MW-13 6/24/2008
<u>Field Parameters</u>												
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	17.73
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5.41
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4.43
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	74
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	230
<u>VOCs (USEPA Method 8260B) µg/L</u>												
Acetone	6,000	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	1	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	0.3	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Tetrachloroethene	0.7	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	600	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Xylenes (Total)	500	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>												
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	<10	<10	<10	<10	<9.5	<9.5	<10	NA
1,2-Dichlorobenzene	20	<10	NA	NA	<10	<10	<10	<10	<9.5	<9.5	<10	NA
1,4-Dichlorobenzene	6	<10	NA	NA	<10	<10	<10	<10	<9.5	<9.5	<10	NA
3-Methylphenol/4-Methylphenol	400/40	<10	NA	NA	<10	<10	<10	<10	NA	NA	<10	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-13 6/9/2009	MW-13 6/14/2010	MW-13 5/1/2012	MW-13 6/18/2013
<u>Field Parameters</u>					
Temperature (°C)	NE	17.82	18.10	17.78	18.23
pH (standard units)	6.5 - 8.5	4.56	4.02	4.70	4.00
Dissolved Oxygen (mg/L)	NE	14.7	2.39	5.75	4.45
Specific Conductance (µS/cm)	NE	950	50	54	54
Oxidation-Reduction Potential (mV)	NE	177.9	54	96.0	384
<u>VOCs (USEPA Method 8260B) µg/L</u>					
Acetone	6,000	<25	<25	<25	<25
Benzene	1	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<25	<10	<10	<10
Carbon Tetrachloride	0.3	<5.0	<1.0	<1.0	<1.0
Chloroform	70	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<5.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<5.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<5.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<25	<10	<10	<10
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	<5.0	<1.0	<1.0	<1.0
Toluene	600	<5.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<5.0	<1.0	<1.0	<1.0
Trichloroethene	3	<5.0	<1.0	<1.0	<1.0
Vinyl Chloride	0.03	<5.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<10	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>					
1,4-Dioxane	3	NA	<9.5	<2.0	NA
1,2,4-Trichlorobenzene	70	<9.4	<9.5	<0.98	NA
1,2-Dichlorobenzene	20	<9.4	<9.5	<0.98	NA
1,4-Dichlorobenzene	6	<9.4	<9.5	<0.98	NA
3-Methylphenol/4-Methylphenol	400/40	<9.4	<9.5	<2.0	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-14 12/15/1999	MW-14 4/9/2007
<u>Field Parameters</u>			
Temperature (°C)	NE	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<25	<25
Benzene	1	<1	<1
2-Butanone (MEK)	4,000	<10	<10
Carbon Tetrachloride	0.3	<1	<1
Chloroform	70	<1	<1
1,1-Dichloroethane	6	<1	<1
1,1-Dichloroethene	350	<1	<1
cis-1,2-Dichloroethene	70	<1	<1
Ethylbenzene	600	<1	<1
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10
Methylene Chloride	5	<5	<5
Tetrachloroethene	0.7	<1	<1
Toluene	600	<1	<1
1,1,1-Trichloroethane	200	<1	<1
Trichloroethene	3	<b>1.3</b>	<1
Vinyl Chloride	0.03	NA	NA
Xylenes (Total)	500	<2	<2
<u>SVOCS (USEPA Method 8270C) µg/L</u>			
1,2,4-Trichlorobenzene	70	NA	<10
1,2-Dichlorobenzene	20	NA	<10
1,4-Dichlorobenzene	6	NA	<10
3-Methylphenol/4-Methylphenol	400/40	NA	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-14D 12/15/1999	MW-14D 4/9/2007
<u>Field Parameters</u>			
Temperature (°C)	NE	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR
<u>VOCS (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<25	<25
Benzene	1	<1	<1
2-Butanone (MEK)	4,000	<10	<10
Carbon Tetrachloride	0.3	<1	<1
Chloroform	70	<1	<1
1,1-Dichloroethane	6	<1	<1
1,1-Dichloroethene	350	<1	<1
cis-1,2-Dichloroethene	70	<1	<1
Ethylbenzene	600	<1	<1
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10
Methylene Chloride	5	<5	<5
Tetrachloroethene	0.7	<1	<1
Toluene	600	<1	<1
1,1,1-Trichloroethane	200	<1	<1
Trichloroethene	3	<1	<1
Vinyl Chloride	0.03	NA	NA
Xylenes (Total)	500	<2	<2
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,2,4-Trichlorobenzene	70	NA	<10
1,2-Dichlorobenzene	20	NA	<10
1,4-Dichlorobenzene	6	NA	<10
3-Methylphenol/4-Methylphenol	400/40	NA	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-15 12/15/1999	MW-15 4/10/2007
<u>Field Parameters</u>			
Temperature (°C)	NE	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>			
Acetone	6,000	<25	<25
Benzene	1	<1	<1
2-Butanone (MEK)	4,000	<10	<10
Carbon Tetrachloride	0.3	<1	<1
Chloroform	70	<1	39
1,1-Dichloroethane	6	<1	<1
1,1-Dichloroethene	350	<1	4.9
cis-1,2-Dichloroethene	70	<1	1.4
Ethylbenzene	600	<1	<1
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10
Methylene Chloride	5	<5	<5
Tetrachloroethene	0.7	<1	120
Toluene	600	<1	2
1,1,1-Trichloroethane	200	<1	<1
Trichloroethene	3	<1	41
Vinyl Chloride	0.03	NA	NA
Xylenes (Total)	500	<2	<2
<u>SVOCs (USEPA Method 8270C) µg/L</u>			
1,2,4-Trichlorobenzene	70	NA	<10
1,2-Dichlorobenzene	20	NA	<10
1,4-Dichlorobenzene	6	NA	<10
2,4-Dimethylphenol	140	NA	NA
2-Methylphenol	NS	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-16 6/25/1998	MW-16 6/11/1999	MW-16 12/14/1999	MW-16 6/22/2000	MW-16 6/6/2001	MW-16 6/18/2002	MW-16 6/25/2003	MW-16 6/23/2004	MW-16 6/8/2005
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<25,000	<12,000	<5,000	<25,000	<25,000	<50,000	<25,000	<12,000	<1,300
Benzene	1	<2,500	<500	<200	<1,000	<500	<5,000	<500	<500	<50
Carbon Tetrachloride	0.3	<2,500	<500	<200	<1,000	<500	<5,000	<500	140	<50
Chloroform	70	<2,500	<500	<200	<1,000	<500	<5,000	<500	130	<50
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<2,500	<500	<200	<1,000	<500	<5,000	<500	<500	<50
1,1-Dichloroethene	350	<2,500	<500	900	<1,000	<500	<5,000	<500	88	<50
cis-1,2-Dichloroethylene	70	NA	<500	<200	<1,000	<500	<5,000	<500	<500	<50
Ethylbenzene	600	<2,500	<500	<200	<1,000	<500	<5,000	<500	<500	<50
Methylene Chloride	5	<2,500	<500	<1,000	<5,000	<5,000	<5,000	<5,000	<500	<250
Tetrachloroethylene	0.7	67,000	73,000	100,000	170,000	65,000	93,000	78,000	36,000	8,200
Toluene	600	<2,500	2,600	3,700	4,000	1,400	<5,000	<500	<500	<50
1,1,1-Trichloroethane	200	6,400	15,000	32,000	26,000	7,400	<5,000	<500	820	<50
Trichloroethylene	3	5,400	8,600	19,000	15,000	4,300	<5,000	<500	640	58
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<2,500	<5,000	540	<2,000	<1,000	<10,000	<1,000	<1,000	<50
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	19	NA	NA	84	58	28	<10	<50	<9.5
1,2-Dichlorobenzene	20	<10	NA	NA	26	24	15	11	<50	<9.5
2,4-Dimethylphenol	100	NA	NA	NA	41	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	68	NA	NA	160	100	44	<10	<50	NA
Di-n-butylphthalate	700	NA	NA	NA	45	44	21	11	<50	<9.5
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.3	NA	NA	NA	NA	14	<50	<50	<250	<48
Phenol	30	NA	NA	NA	30	21	11	<10	<50	<9.5

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-16 6/21/2006	MW-16 4/10/2007	MW-16 12/13/2007	MW-16 6/24/2008	MW-16 12/8/2008	MW-16 6/10/2008	MW-16 12/29/2009	MW-16 6/14/2010
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	16.71	18.91	15.08	15.37	13.74	14.41
pH (standard units)	6.5 - 8.5	NR	NR	4.12	4.98	3.82	4.76	4.68	4.32
Dissolved Oxygen (mg/L)	NE	NR	NR	3.21	0.84	1.37	8.85	0.73	0.36
Specific Conductance (µS/cm)	NE	NR	NR	246	215	202	159	197	160
Oxidation-Reduction Potential (mV)	NE	NR	NR	315	225	191	126.2	174	27.3
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<5,000	<130	<5,000	<5,000	<12,000	<12,000	<25,000	<25,000
Benzene	1	<200	<5	<200	<200	<500	<500	<1,000	<500
Carbon Tetrachloride	0.3	<200	<5	<200	<200	<500	<2,500	<5,000	<1,000
Chloroform	70	<200	<5	<200	<200	<500	<2,500	<5,000	<1,000
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	<5,000	<1,000
1,1-Dichloroethane	6	<200	<5	<200	<200	<500	<2,500	<5,000	<1,000
1,1-Dichloroethene	350	<200	<5	<200	<200	<500	<2,500	<5,000	<1,000
cis-1,2-Dichloroethene	70	<200	70	<200	<200	<500	<2,500	<5,000	<1,000
Ethylbenzene	600	<200	<5	<200	<200	<500	<2,500	<5,000	<1,000
Methylene Chloride	5	<1,000	<25	<1,000	<1,000	<2,500	<2,500	<5,000	<5000
Tetrachloroethene	0.7	27,000	140,000	47,000	41,000	44,000	110,000 J	25,000	69,000
Toluene	600	<200	6.9	<200	<200	<500	<2,500	<5,000	<1,000
1,1,1-Trichloroethane	200	<200	31	<200	<200	<500	<2,500	<5,000	<1,000
Trichloroethene	3	480	250	370	340	<500	<2,500	<5,000	<1,000
Vinyl Chloride	0.03	NA	NA	<200	<200	<500	<2,500	<5,000	<1,000
Xylenes (Total)	500	<400	<10	<400	<400	<1,000	<5,000	<10,000	<2,000
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	<9.4
1,2,4-Trichlorobenzene	70	<9.8	<10	NA	<9.4	NA	20	NA	11
1,2-Dichlorobenzene	20	<9.8	<10	NA	<9.4	NA	29	NA	17
2,4-Dimethylphenol	100	NA	NA	NA	<9.4	NA	NA	NA	<9.4
3-Methylphenol/4-Methylphenol	400/40	NA	<10	NA	<9.4	NA	13	NA	<9.4
Di-n-butylphthalate	700	<9.8	<10	NA	<9.4	NA	<9.4	NA	<9.4
Naphthalene	6	NA	<10	NA	<9.4	NA	<9.4	NA	<9.4
Pentachlorophenol	0.3	<49	<50	NA	<47	NA	<47	NA	<47
Phenol	30	<9.8	<10	NA	<9.4	NA	<9.4	NA	<9.4

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-16 12/17/2010	MW-16 6/21/2011	MW-16 12/10/2013	MW-16 6/20/2014	MW-16 12/18/2014	MW-16 6/24/2015	MW-16 12/10/2015	MW-16 9/22/2016
<u>Field Parameters</u>									
Temperature (°C)	NE	17.22	18.01	13.63	16.08	14.72	17.2	16.44	23.0
pH (standard units)	6.5 - 8.5	6.82	5.28	4.46	4.82	3.57	4.59	4.89	4.54
Dissolved Oxygen (mg/L)	NE	0.25	1.95	1.69	5.52	2.55	1.39	5.65	2.3
Specific Conductance (µS/cm)	NE	91	204	149	134	157	151	155	114
Oxidation-Reduction Potential (mV)	NE	101.9	300.1	-63.1	149.4	273	223.8	225.7	243
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<2,5000	<25000	<25000	<25000	<10,000	< 10000	< 10000	< 10000
Benzene	1	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Carbon Tetrachloride	0.3	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Chloroform	70	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
1,2-Dichlorobenzene	20	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
1,1-Dichloroethane	6	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
1,1-Dichloroethene	350	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
cis-1,2-Dichloroethylene	70	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Ethylbenzene	600	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Methylene Chloride	5	<5,000	<5000	<5000	<5000	<5,000	< 5000	< 5000	< 5000
Tetrachloroethylene	0.7	67,000	49,000	84,000	57,000	59,000	65,000	99,000	53,000
Toluene	600	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
1,1,1-Trichloroethane	200	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Trichloroethylene	3	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Vinyl Chloride	0.03	<1,000	<1000	<1000	<1000	<1,000	< 1000	< 1000	< 1000
Xylenes (Total)	500	<2,000	<2000	<2000	<2000	<2,000	< 1000	< 1000	< 1000
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,4-Dioxane	3	NA	<2.2	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	9.0	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	11	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	100	NA	<9.4	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	4.2	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	700	NA	2.1	NA	NA	NA	NA	NA	NA
Naphthalene	6	NA	<0.22	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.3	NA	6.8	NA	NA	NA	NA	NA	NA
Phenol	30	NA	<1.1	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-17D 9/25/1996	MW-17D 6/25/1998	MW-17D 1/15/1999	MW-17D 6/10/1999	MW-17D 12/14/1999	MW-17D 6/21/2000	MW-17D 12/19/2000	MW-17D 6/5/2001	MW-17D 12/14/2001
<b>Field Parameters</b>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	<500	<1,000	<500	<250	<250	<250	NA	<250	<250
Benzene	1	<50	<100	<50	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	0.3	<50	<100	<50	<10	<10	<10	NA	<10	<10
Chloroform	70	<50	<100	<50	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	350	70	<100	<50	45	54	46	130	64	87
cis-1,2-Dichloroethene	70	<50	<100	<50	12	11	12	17	14	13
Ethylbenzene	600	<50	<100	<50	<10	<10	<10	NA	<10	<10
Methylene Chloride	5	<50	<100	<50	<10	<50	<50	<50	<50	<50
Tetrachloroethene	0.7	1,400	1,500	1,100	910	1,200	1,000	1,800	1,400	1,200
Toluene	600	<50	<100	<50	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	200	<50	<100	<50	<10	<10	<10	<10	<10	<10
Trichloroethene	3	510	560	400	400	470	400	720	640	630
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<100	<100	<100	<20	<20	<20	<20	<20	<20
<b>SVOCS (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	<10	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-17D 6/18/2002	MW-17D 12/4/2002	MW-17D 6/25/2003	MW-17D 12/10/2003	MW-17D 6/23/2004	MW-17D 12/16/2004	MW-17D 6/7/2005	MW-17D 12/12/2005	MW-17D 6/21/2006
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<1,000	<5,000	<500	<250	<250	<500	<250	<500	<500
Benzene	1	<100	<200	<20	<10	<10	<20	<10	<20	38
Carbon Tetrachloride	0.3	<100	<200	<20	<10	<10	<20	<10	<20	<20
Chloroform	70	<100	<200	<20	<10	<10	<20	<10	<20	<20
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	350	130	<200	120	59	170	120	47	91	120
cis-1,2-Dichloroethene	70	<100	25	13	32	25	19	35	68	
Ethylbenzene	600	<100	<200	<20	<10	<10	<20	<10	<20	<20
Methylene Chloride	5	<100	<1,000	<20	<50	<50	<100	<50	<100	<100
Tetrachloroethene	0.7	2,200	2,100	2,000	1,200	2,400	2,200	760	1,500	1,900
Toluene	600	<100	<200	<20	<10	<10	<20	<10	<20	<20
1,1,1-Trichloroethane	200	<100	<200	<20	<10	<10	<20	<10	<20	<20
Trichloroethene	3	970	1,000	1,000	560	1,100	960	400	930	1,100
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<200	<400	<40	<20	<20	<40	<20	<40	56
<u>SVOCS (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	<10	NA	NA	<10	NA	<10	NA
1,2-Dichlorobenzene	20	NA	NA	<10	NA	NA	<10	NA	<10	NA
1,4-Dichlorobenzene	6	NA	NA	<10	NA	NA	<10	NA	<10	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA	<10	NA	NA	<10	NA	<10	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-17D 12/7/2006	MW-17D 4/10/2007	MW-17D 12/13/2007	MW-17D 6/25/2008	MW-17D 12/8/2008	MW-17D 6/9/2009	MW-17D 12/29/2009	MW-17D 6/14/2010	MW-17D 12/17/2010
<b>Field Parameters</b>										
Temperature (°C)	NE	NR	NR	19.73	23.61	18.05	21.94	17.42	22.40	17.76
pH (standard units)	6.5 - 8.5	NR	NR	5.86	6.10	6.59	5.90	7.63	5.92	6.27
Dissolved Oxygen (mg/L)	NE	NR	NR	1.87	2.76	1.67	4.69	1.89	1.12	3.71
Specific Conductance (µS/cm)	NE	NR	NR	142	139	128	128	142	136	208
Oxidation-Reduction Potential (mV)	NE	NR	NR	112	132	118	102.3	95	-38.7	206.1
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<250	<500	<500	<500	<500	<500	<500	<500	<500
Benzene	1	<10	<20	<20	<20	<20	<20	<20	<20	<20
Carbon Tetrachloride	0.3	<10	<20	<20	<20	<20	<100	<100	<20	<20
Chloroform	70	<10	<20	<20	<20	<20	<100	<100	<20	<20
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	<100	<20	<20	<20
1,1-Dichloroethene	350	240	170	150	130	110	160	130	140	150
cis-1,2-Dichloroethene	70	52	76	95	110	120	180	150	220	270
Ethylbenzene	600	<10	<20	<20	<20	<20	<100	<100	<20	<20
Methylene Chloride	5	80	<100	<100	<100	<100	<100	<100	<100	<100
Tetrachloroethene	0.7	1,900	2,400	2,200	2,400	2,100	2,700	2,000	2,600	3,000
Toluene	600	<10	<20	<20	<20	<20	<100	<100	<20	<20
1,1,1-Trichloroethane	200	<10	<20	<20	<20	<20	<100	<100	<20	<20
Trichloroethene	3	1,100	1,400	1,300	1,400	1,200	1,500	1,200	1,500	1,800
Vinyl Chloride	0.03	NA	NA	<20	<20	<20	<100	<100	<20	<20
Xylenes (Total)	500	<20	<40	<40	<40	<40	<200	<200	<40	<40
<u>SVOCS (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	<10	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	<10	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	<10	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	<10	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-17D 6/20/2011	MW-17D 12/13/2011	MW-17D 5/1/2012	MW-17D 12/12/2012	MW-17D 6/18/2013	MW-17D 12/10/2013	MW-17D 6/20/2014	MW-17D 12/17/2014	MW-17D 6/24/2015	MW-17D 12/10/2015
<b>Field Parameters</b>											
Temperature (°C)	NE	19.91	14.48	19.91	19.54	20.81	18.41	21.37	18.37	22.90	20.02
pH (standard units)	6.5 - 8.5	6.94	5.79	5.72	5.65	5.34	5.75	5.78	4.87	5.81	5.82
Dissolved Oxygen (mg/L)	NE	2.28	5.30	2.09	1.16	1.48	1.83	4.95	1.57	1.68	1.87
Specific Conductance (µS/cm)	NE	176	290	150	162	166	153	171	169	184	104
Oxidation-Reduction Potential (mV)	NE	128.3	269.0	131.2	204.0	250.0	-98.3	122.2	176	150.6	171.9
<b>VOCs (USEPA Method 8260B) µg/L</b>											
Acetone	6,000	<130 J	<500	<500	<500	<500	<500	<630	<250	< 250	< 250
Benzene	1	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
Carbon Tetrachloride	0.3	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
Chloroform	70	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
1,2-Dichlorobenzene	20	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
1,1-Dichloroethene	350	130 J	120	140	130	110	130	96	100	110	100
cis-1,2-Dichloroethene	70	270 J	230	270	240	230	270	240	200	240	240
Ethylbenzene	600	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
Methylene Chloride	5	<25 J	<100	<100	<100	<100	<100	<130	<130	< 130	< 130
Tetrachloroethene	0.7	2,300 J	2,100	2,400	2,700	2,100	2,000	1,900	2,000	2,200	2,300
Toluene	600	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
1,1,1-Trichloroethane	200	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
Trichloroethene	3	2,000 J	1,400	1,500	1,600	1,200	1,200	970	990	1,000	1,100
Vinyl Chloride	0.03	<5.0 J	<20	<20	<20	<20	<20	<25	<25	< 25	< 25
Xylenes (Total)	500	<10 J	<40	<40	<40	<40	<40	<50	<50	< 25	< 25
<b>SVOCS (USEPA Method 8270C) µg/L</b>											
1,4-Dioxane	3	NA	NA	140	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA	<21	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

NCAC 2L Standard 0	NCAC 2L Standard	MW-17D 9/22/2016
<u>Field Parameters</u>		
Temperature (°C)	NE	22.4
pH (standard units)	6.5 - 8.5	5.68
Dissolved Oxygen (mg/L)	NE	1.3
Specific Conductance (µS/cm)	NE	160
Oxidation-Reduction Potential (mV)	NE	223
<u>VOCs (USEPA Method 8260B) µg/L</u>		
Acetone	6,000	<250
Benzene	1	<250
Carbon Tetrachloride	0	<25
Chloroform	70	<25
1,2-Dichlorobenzene	20	<25
1,1-Dichloroethene	350	100
cis-1,2-Dichloroethene	70	270
Ethylbenzene	600	<25
Methylene Chloride	5	<130
Tetrachloroethene	1	3,000
Toluene	600	<25
1,1,1-Trichloroethane	200	<25
Trichloroethene	3	1,400
Vinyl Chloride	0	<25
Xylenes (Total)	500	<25
<u>SVOCs (USEPA Method 8270C) µg/L</u>		
1,4-Dioxane	3	NA
1,2,4-Trichlorobenzene	70	NA
1,2-Dichlorobenzene	20	NA
1,4-Dichlorobenzene	6	NA
3-Methylphenol/4-Methylphenol	400/40	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-18 6/25/1998	MW-18 6/10/1999	MW-18 12/15/1999	MW-18 6/21/2000	MW-18 6/5/2001	MW-18 6/18/2002	MW-18 6/25/2003	MW-18 6/23/2004	MW-18 12/16/2004
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	NA	ND	<25	<25	<25	<50	<25	<25	<25
Benzene	1	NA	ND	<1	<1	<1	<5	<1	<1	<1
2-Butanone (MEK)	4,000	<25	ND	<10	<10	<10	<25	<10	<10	<10
Carbon Tetrachloride	0.3	NA	ND	<1	<1	<1	<5	<1	<1	<1
Chloroform	70	<5	ND	<1	<1	<1	<5	<1	<1	<1
1,1-Dichloroethane	6	<5	ND	<1	<1	<1	<5	<1	<1	<1
1,2-Dichloroethane	0.4	NA	NA	NA	<1	<1	<5	3.8	<1	<1
1,1-Dichloroethene	350	<5	ND	<1	<1	<1	<5	<1	<1	<1
cis-1,2-Dichloroethene	70	<5	ND	<1	<1	<1	<5	<1	<1	<1
Ethylbenzene	600	NA	ND	<1	<1	<1	<5	<1	<1	<1
Methyl Isobutyl Ketone (MIBK)	NE	NA	ND	<10	<10	<10	<25	<10	<10	<10
Methylene Chloride	5	<5	ND	<5	<5	<5	<5	<5	1.1	<5
Tetrachloroethene	0.7	10	ND	<1	<1	7.6	<5	<1	6.2	1
Toluene	600	<5	1.2	<1	<1	<1	<5	<1	<1	<1
1,1,1-Trichloroethane	200	<5	ND	<1	<1	<1	<5	<1	<1	<1
Trichloroethene	3	<5	ND	<1	<1	3.9	<5	<1	2	<1
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<5	ND	<2	<2	<2	<5	<2	<2	<2
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	NA	NA	<10	NA	<10
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	<10	NA	<10
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA	<10	NA	<10
3-Methylphenol/4-Methylphenol	400/40	NA	NA	NA	NA	NA	NA	<10	NA	<10

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-18 6/7/2005	MW-18 6/21/2006	MW-18 4/9/2007	MW-18 6/24/2008	MW-18 6/9/2009	MW-18 6/14/2010	MW-18 6/20/2011	MW-18 5/1/2012	MW-18 6/18/2013
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	19.85	17.98	18.49	18.86	17.80	19.75
pH (standard units)	6.5 - 8.5	NR	NR	NR	11.41	10.23	11.53	6.16	6.60	11.44
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	0.24	1.29	0.10	3.03	5.02	1.08
Specific Conductance (µS/cm)	NE	NR	NR	NR	902	1182	2027	402	253	2
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	-60	9.8	-119.6	181.9	-40.1	-89.0
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<25	<25	<25	<25	<25	<25	<b>31</b>	<25	<25
Benzene	1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<1	<1	<10	<10	<25	<10	<10	<10	<10
Carbon Tetrachloride	0.3	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	0.4	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	600	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<1	<1	<10	<10	<25	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Toluene	600	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	3	<1	<1	<1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	0.03	NA	NA	NA	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<2	<2	<2	<2.0	<10	<2.0	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	NA	<9.4	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	NA	<9.4	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	<9.4	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA	NA	<9.4	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-19 9/26/1996	MW-19 6/26/1998	MW-19 12/23/1998	MW-19 6/11/1999	MW-19 12/14/1999	MW-19 6/22/2000	MW-19 12/18/2000	MW-19 6/5/2001	MW-19 12/13/2001
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<10,000	<25,000	<25,000	<2,500	<6,200	<6,200	NA	<6,200	<5,000
Benzene	1	<1,000	<2,500	<2,500	<100	<250	<250	330	300	320
Carbon Tetrachloride	0.3	<1,000	<2,500	<2,500	<100	<250	<250	NA	<250	<200
Chloroform	70	<1,000	<2,500	<2,500	<100	<250	<250	<250	<250	<200
1,1-Dichloroethane	6	<1,000	<2,500	<2,500	<100	<250	<250	<250	<250	<200
1,1-Dichloroethene	350	2,000	<2,500	<2,500	590	1,900	1,700	1,600	<250	1,800
cis-1,2-Dichloroethene	70	<1,000	<2,500	<2,500	<100	<250	<250	<250	<250	<200
Ethylbenzene	600	<1,000	<2,500	<2,500	<100	<250	<250	NA	<250	<200
Methylene Chloride	5	<1,000	<2,500	<2,500	<100	<1,200	<1,200	<1,200	<1,200	<1,000
Tetrachloroethene	0.7	25,000	36,000	41,000	9,800	39,000	30,000	28,000	24,000	28,000
Toluene	600	<1,000	<2,500	<2,500	<100	<250	<250	<250	<250	<200
1,1,1-Trichloroethane	200	<1,000	<2,500	<2,500	<100	1,000	720	720	590	640
Trichloroethene	3	10,000	8,900	8,800	5,100	10,000	8,000	7,200	6,500	7,600
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<2,000	<2,500	<5,000	<200	<500	<500	<500	<500	<400
<u>SVOCS (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	110	120	NA	100	77	110	45	91
1,2-Dichlorobenzene	20	NA	180	200	NA	180	120	190	72	160
1,4-Dichlorobenzene	6	NA	<20	NA	NA	10	<10	<10	<10	<10
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-19 6/18/2002	MW-19 12/4/2002	MW-19 6/26/2003	MW-19 12/10/2003	MW-19 6/24/2004	MW-19 12/16/2004	MW-19 6/8/2005	MW-19 12/12/2005	MW-19 6/22/2006
<b>Field Parameters</b>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	<25,000	<12,000	<10,000	<2,500	<12,000	<12,000	<5,000	<6,300	<5,000
Benzene	1	<2,500	<500	<400	230	<500	<500	260	280	300
Carbon Tetrachloride	0.3	<2,500	<500	<400	<100	<500	<500	410	<250	<200
Chloroform	70	<2,500	<500	<400	<100	<500	<500	<200	<250	<200
1,1-Dichloroethane	6	<2,500	<500	<400	<100	<500	<500	<200	<250	<200
1,1-Dichloroethene	350	<2,500	1,900	1,600	1,000	1,900	1,400	1,300	1,000	1,300
cis-1,2-Dichloroethene	70	<2,500	<500	<400	130	<500	<500	240	<250	320
Ethylbenzene	600	<2,500	<500	<400	<100	<500	<500	<200	<250	<200
Methylene Chloride	5	<2,500	<2,500	<2,000	<500	<2,500	<2,500	<1,000	<1,300	<1,000
Tetrachloroethene	0.7	14,000	46,000	41,000	28,000	39,000	39,000	31,000	32,000	29,000
Toluene	600	<2,500	<500	<400	<100	<500	<500	<200	<250	<200
1,1,1-Trichloroethane	200	<2,500	920	730	390	550	<500	<200	390	320
Trichloroethene	3	38,000	10,000	8,500	6,200	8,800	6,800	6,900	6,600	6,500
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<5,000	<1,000	<400	<200	<1,000	<1,000	<400	<500	<400
<b>SVOCs (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	110	130	120	100	95	95	NA	120	130
1,2-Dichlorobenzene	20	190	240	170	170	160	160	NA	180	190
1,4-Dichlorobenzene	6	<10	<20	<10	<20	<10	<10	NA	<9.4	10
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-19 12/7/2006	MW-19 4/10/2007	MW-19 12/13/2007	MW-19 6/23/2008	MW-19 12/8/2008	MW-19 6/10/2009	MW-19 12/29/2009	MW-19 6/14/2010	MW-19 12/17/2010
<b>Field Parameters</b>										
Temperature (°C)	NE	NR	NR	18.94	20.72	15.03	21.95	17.95	20.32	17.11
pH (standard units)	6.5 - 8.5	NR	NR	6.30	5.20	6.24	6.12	6.48	6.02	7.36
Dissolved Oxygen (mg/L)	NE	NR	NR	0.35	0.70	0.67	3.61	0.07	0.32	0.37
Specific Conductance (µS/cm)	NE	NR	NR	246	188	220	287	228	214	605
Oxidation-Reduction Potential (mV)	NE	NR	NR	116	131.9	-80	99	-70	-84.2	136.6
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	<2,500	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
Benzene	1	150	210	<200	200	<200	<200	<200	<200	<200
Carbon Tetrachloride	0.3	<100	<200	<200	<200	<200	<1,000	<1,000	<200	<200
Chloroform	70	<100	<200	<200	<200	<200	<1,000	<1,000	<200	<200
1,1-Dichloroethane	6	<100	<200	<200	<200	<200	<1,000	<1,000	<200	<200
1,1-Dichloroethene	350	1,100	1,700	990	1,000	550	<1,000	<1,000	740	500
cis-1,2-Dichloroethene	70	170	410	200	300	<200	<1,000	<1,000	280	290
Ethylbenzene	600	<100	<200	<200	<200	<200	<1,000	<1,000	<200	<200
Methylene Chloride	5	<500	1,100	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Tetrachloroethene	0.7	24,000	35,000	28,000	31,000	20,000	25,000	16,000	27,000	31,000
Toluene	600	<100	<200	<200	<200	<200	<1,000	<1,000	<200	<200
1,1,1-Trichloroethane	200	260	350	250	260	<200	<1,000	<1,000	<200	<200
Trichloroethene	3	4,000	8,100	4,300	5,200	3,200	3,900	2,500	3,800	4,100
Vinyl Chloride	0.03	NA	NA	<200	<200	<200	<1,000	<1,000	<200	<200
Xylenes (Total)	500	<200	<400	<400	<400	<400	<2,000	<2,000	<400	<400
<b>SVOCs (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	11	NA
1,2,4-Trichlorobenzene	70	120	91	NA	110	NA	97	NA	73	NA
1,2-Dichlorobenzene	20	180	140	NA	130	NA	100	NA	62	NA
1,4-Dichlorobenzene	6	<9.4	<10	NA	<9.4	NA	<9.4	NA	<9.4	NA
Naphthalene	6	NA	<10	NA	<9.4	NA	<9.4	NA	<9.4	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-19 6/21/2011	MW-19 12/13/2011	MW-19 5/1/2012	MW-19 12/13/2012	MW-19 6/19/2013	MW-19 6/20/2014	MW-19 9/22/2016
<u>Field Parameters</u>								
Temperature (°C)	NE	19.27	18.67	19.40	18.65	21.09	19.63	22.8
pH (standard units)	6.5 - 8.5	6.88	6.29	6.45	6.05	6.25	6.53	6.17
Dissolved Oxygen (mg/L)	NE	0.51	0.81	1.11	0.09	0.00	4.50	0.7
Specific Conductance (µS/cm)	NE	272	354	219	644	227	257	217
Oxidation-Reduction Potential (mV)	NE	136.2	127.0	-117.5	-19.0	149.0	10.8	57
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<5000	<5000	<5000	<5000	<5000	<5000	<2000
Benzene	1	<200	<200	<200	<200	<200	<200	220
Carbon Tetrachloride	0.3	<200	<200	<200	<200	<200	<200	<200
Chloroform	70	<200	<200	<200	<200	<200	<200	<200
1,1-Dichloroethane	6	<200	<200	<200	<200	<200	<200	<200
1,1-Dichloroethene	350	920	500	740	520	680	700	780
cis-1,2-Dichloroethene	70	450	350	540	640	720	1,400	2,300
Ethylbenzene	600	<200	<200	<200	<200	<200	<200	<200
Methylene Chloride	5	<1000	<1000	<1000	<1000	<1000	<1000	<1000
Tetrachloroethene	0.7	31,000	19,000	22,000	19,000	22,000	21,000	20,000
Toluene	600	<200	<200	<200	<200	<200	<200	<200
1,1,1-Trichloroethane	200	270	<200	<200	<200	<200	<200	<200
Trichloroethene	3	5,000	3,000	4,100	3,300	4,200	4,400	4,500
Vinyl Chloride	0.03	<200	<200	<200	<200	<200	<200	<200
Xylenes (Total)	500	<400	<400	<400	<400	<400	<400	<200
<u>SVOCs (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	8.1	NA	13	NA	28	28 J	NA
1,2,4-Trichlorobenzene	70	49	NA	49	NA	28	22 J	NA
1,2-Dichlorobenzene	20	51	NA	78	NA	26	26 J	NA
1,4-Dichlorobenzene	6	4.1	NA	<4.9	NA	3.5	<9.4	NA
Naphthalene	6	1.2	NA	1.3	NA	<0.19	<1.9	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-20 6/25/1998	MW-20 1/15/1999	MW-20 6/10/1999	MW-20 12/14/1999	MW-20 6/22/2000	MW-20 12/19/2000	MW-20 6/5/2001	MW-20 12/13/2001	MW-20 12/4/2002
<b>Field Parameters</b>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	NA	NA	ND	<2,500	<120	NA	<2,500	<1,200	<2,500
Benzene	1	NA	NA	ND	<100	66	<50	<100	<50	150
Carbon Tetrachloride	0.3	NA	NA	ND	<100	8.3	NA	<100	<50	<100
Chloroform	70	<500	NA	ND	<100	84	88	110	87	130
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<500	<500	ND	<100	79	82	100	120	120
1,2-Dichloroethane	0.4	NA	NA	NA	NA	23	NA	<100	<50	<100
1,1-Dichloroethene	350	1,400	2,700	1,300	2,300	1,400	2,200	2,900	2,300	3,200
cis-1,2-Dichloroethene	70	<500	<500	ND	<100	44	<50	<100	52	<100
Ethylbenzene	600	NA	NA	ND	<100	<5	NA	<100	<50	<100
Methylene Chloride	5	<500	350	ND	510	550	510	640	920	1,600
Tetrachloroethene	0.7	5,000	13,000	5,100	8,400	4,400	7,400	10,000	5,900	12,000
Toluene	600	<500	#N/A	ND	<100	5.8	<50	<100	<50	<100
1,1,1-Trichloroethane	200	530	1,200	620	980	770	930	900	450	970
Trichloroethene	3	7,900	9,600	8,200	10,000	6,900	8,500	11,000	8,000	10,000
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<500	NA	ND	<200	36	<100	<200	<100	<200
<b>SVOCs (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	80	53	NA	97	52	84	NA	50	120
1,2-Dichlorobenzene	20	120	92	NA	170	94	150	NA	83	230
1,4-Dichlorobenzene	6	<20	NA	NA	20	10	15	NA	10	25
3-Methylphenol/4-Methylphenol	400/40	<20	NA	NA	NA	<10	NA	NA	<10	<20
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-20 6/26/2003	MW-20 12/10/2003	MW-20 6/24/2004	MW-20 12/15/2004	MW-20 6/8/2005	MW-20 12/12/2005	MW-20 6/21/2006	MW-20 12/7/2006	MW-20 4/9/2007
<u>Field Parameters</u>										
Temperature (°C)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<5,000	<2,500	<2,500	<2,500	<1,300	<1,300	<1,300	<1,300	<25
Benzene	1	140	<100	<100	<100	69	63	58	58	56
Carbon Tetrachloride	0.3	120	<100	<100	<100	<50	<50	<50	<50	31
Chloroform	70	170	160	130	140	120	120	130	120	140
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	6	<100	200	180	190	180	160	250	250	320
1,2-Dichloroethane	0.4	260	<100	<100	<100	<50	<50	<50	64	68
1,1-Dichloroethene	350	3,200	2,800	2,300	2,300	2,100	1,400	5,200	4,200	8,000
cis-1,2-Dichloroethylene	70	300	<100	<100	<100	6,500	8,000	550	92	150
Ethylbenzene	600	<100	<100	<100	<100	<50	<50	<50	<50	13
Methylene Chloride	5	2,500	2,800	2,600	2,600	2,100	1,800	5,200	5,200	7,200
Tetrachloroethylene	0.7	9,700	8,100	5,700	6,400	690	270	8,100	8,600	11,000
Toluene	600	120	<100	<100	<100	<50	<50	<50	<50	35
1,1,1-Trichloroethane	200	580	340	230	200	180	160	250	<50	290
Trichloroethylene	3	9,100	7,400	5,900	5,800	2,200	460	9,500	9,800	14,000
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	500	<200	<200	<200	<200	<50	<100	110	140	250
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	120	79	81	85	NA	44	120	150	NA
1,2-Dichlorobenzene	20	230	150	130	150	NA	93	270	340	NA
1,4-Dichlorobenzene	6	25	13	15	<10	NA	9.7	<50	32	NA
3-Methylphenol/4-Methylphenol	400/40	<20	<10	<10	<10	NA	<9.4	NA	<10	NA
Naphthalene	6	NA	NA	NA	NA	NA	NA	NA	18	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-20 12/13/2007	MW-20 6/25/2008	MW-20 12/8/2008	MW-20 6/9/2009	MW-20 12/29/2009	MW-20 6/14/2010	MW-20 12/17/2010	MW-20 6/21/2011	MW-20 12/13/2011
<u>Field Parameters</u>										
Temperature (°C)	NE	18.40	19.47	14.55	19.07	17.52	19.19	17.32	18.17	18.43
pH (standard units)	6.5 - 8.5	6.02	6.44	5.81	6.40	6.17	5.76	6.53	6.06	7.74
Dissolved Oxygen (mg/L)	NE	0.37	0.65	0.35	0.79	0.1	0.16	0.92	0.64	1.27
Specific Conductance (µS/cm)	NE	522	482	448	421	510	553	165	398	950
Oxidation-Reduction Potential (mV)	NE	-105	-196	-184	-84.2	-121	-118.8	128.4	-105.9	-182.0
<u>VOCs (USEPA Method 8260B) µg/L</u>										
Acetone	6,000	<1,300	<2,500	<2,500	<2,500	<1,200	<2,500	<2,500	<2500	<2500
Benzene	1	66	<100	<100	<100	52	<100	<100	<100	<100
Carbon Tetrachloride	0.3	<50	<100	<100	<500	<250	<100	<100	<100	<100
Chloroform	70	180	160	190	<500	<250	240	320	100	280
1,2-Dichlorobenzene	20	NA	NA	NA	NA	430	1,100	680	<100	870
1,1-Dichloroethane	6	380	330	370	<500	410	550	770	440	640
1,2-Dichloroethane	0.4	<50	<100	<100	<500	<250	<100	<100	<100	<100
1,1-Dichloroethene	350	7,500	5,400	4,700	4,900	4,100	6,500	7,100	600	4,900
cis-1,2-Dichloroethene	70	150	360	980	1,200	1,700	4,700	7,900	5,200	7,200
Ethylbenzene	600	<50	<100	<100	<500	<250	<100	<100	<100	<100
Methylene Chloride	5	7,700	5,200	4,500	5,100	2,700	1,900	<500	<500	<500
Tetrachloroethene	0.7	13,000	10,000	8,000	7,200	4,100	5,300	3,400	<100	3,800
Toluene	600	59	<100	<100	<500	<250	<100	<100	<100	<100
1,1,1-Trichloroethane	200	310	230	180	<500	<250	<100	<100	<100	110
Trichloroethene	3	13,000	11,000	11,000	10,000	7,900	12,000	9,500	<100	6,000
Vinyl Chloride	0.03	<50	<100	<100	<500	<250	<100	<100	<100	<100
Xylenes (Total)	500	250	<200	<200	<1,000	<1,000	350	340	<200	380
<u>SVOCs (USEPA Method 8270C) µg/L</u>										
1,4-Dioxane	3	NA	NA	NA	NA	NA	700	NA	930 J	NA
1,2,4-Trichlorobenzene	70	NA	230	NA	200	NA	320	NA	170 J	NA
1,2-Dichlorobenzene	20	NA	540	NA	450	NA	680	NA	500 J	NA
1,4-Dichlorobenzene	6	NA	<47	NA	38	NA	<100	NA	<98	NA
3-Methylphenol/4-Methylphenol	400/40	NA	<47	NA	<38	NA	<100	NA	<200	NA
Naphthalene	6	NA	<47	NA	<38	NA	<38	NA	27 J	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-20 5/2/2012	MW-20 12/13/2012	MW-20 6/19/2013	MW-20 6/20/2014
<b>Field Parameters</b>					
Temperature (°C)	NE	19.29	18.30	21.45	20.15
pH (standard units)	6.5 - 8.5	6.50	6.19	6.14	6.16
Dissolved Oxygen (mg/L)	NE	1.08	0.69	0.00	9.65
Specific Conductance (µS/cm)	NE	656	254	674	686
Oxidation-Reduction Potential (mV)	NE	-103.0	39.0	-39.0	-25.8
<b>VOCs (USEPA Method 8260B) µg/L</b>					
Acetone	6,000	<2500	<2500	<2500	<2500
Benzene	1	<100	<100	<100	<100
Carbon Tetrachloride	0.3	<100	<100	<100	<100
Chloroform	70	340	290	330	370
1,2-Dichlorobenzene	20	1,200	1,000	1,000	1,100
1,1-Dichloroethane	6	1,300	670	770	840
1,2-Dichloroethane	0.4	<100	<100	<100	<100
1,1-Dichloroethene	350	7,600	4,800	5,200	4,400
cis-1,2-Dichloroethene	70	9,700	7,900	9,700	10,000
Ethylbenzene	600	<100	<100	<100	<100
Methylene Chloride	5	<500	<500	<500	<500
Tetrachloroethene	0.7	4,400	3,700	2,600	800
Toluene	600	<100	<100	<100	<100
1,1,1-Trichloroethane	200	110	110	<100	<100
Trichloroethene	3	7,100	5,300	4,400	1,600
Vinyl Chloride	0.03	<100	<100	<100	<100
Xylenes (Total)	500	420	310	<200	250
<b>SVOCS (USEPA Method 8270C) µg/L</b>					
1,4-Dioxane	3	650	NA	1400 J	840 J
1,2,4-Trichlorobenzene	70	260	NA	360 J	350 J
1,2-Dichlorobenzene	20	600	NA	810 J	780 J
1,4-Dichlorobenzene	6	49	NA	63 J	60 J
3-Methylphenol/4-Methylphenol	400/40	<96	NA	<120	<96
Naphthalene	6	22	NA	30 J	29 J

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-21 6/26/1998	MW-21 6/14/1999	MW-21 12/13/1999	MW-21 6/5/2001	MW-21 4/10/2007	MW-21 6/23/2008	MW-21 6/10/2009	MW-21 6/15/2010
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	20.84	19.82	19.43	
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	6.75	6.49	6.31	
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	0.47	0.64	0.27	
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	287	235	267	
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	-210	-90.3	-162.1	
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<12,000	<2,500	<2,500	<2,500	<25	<12000	<6,200	<6,200
Benzene	1	<1,200	750	360	350	280	<500	<250	<250
Carbon Tetrachloride	0.3	<1,200	<100	<100	<100	2.2	<500	<1,200	<250
1,2-Dichlorobenzene	20	<1,200	<100	<100	<100	<10	<500	<1,200	250
1,1-Dichloroethane	6	<1,200	130	<100	<100	14	<500	<1,200	<250
1,1-Dichloroethene	350	1,600	4,100	1,500	1,500	2,900	2,100	1,600	1,600
cis-1,2-Dichloroethene	70	NA	<100	<100	<100	140	<500	<1,200	830
trans-1,2-Dichloroethene	100	NA	NA	NA	NA	2.2	<500	<1,200	<250
Ethylbenzene	600	<1,200	<100	<100	<100	1.7	<500	<1,200	<250
Methylene Chloride	5	<1,200	<100	740	1,000	2,500	<2,500	<1,200	<1,200
Tetrachloroethene	0.7	33,000	37,000	17,000	21,000	37,000	42,000	33,000	33,000
Toluene	600	<1,200	<100	<100	<100	6.9	<500	<1,200	<250
1,1,1-Trichloroethane	200	<1,200	<100	670	600	650	580	<1,200	400
Trichloroethene	3	8,000	21,000	10,000	11,000	13,000	12,000	9,000	9,400
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	<500	<1200	<250
Xylenes (Total)	500	<2,500	NA	<200	<200	100	<1,000	<2,500	<500
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	NA	64	NA	NA	90	NA	NA	NA
1,2-Dichlorobenzene	20	NA	100	NA	NA	140	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3	NA	11	NA	NA	<10	NA	NA	NA
Butylbenzyl phthalate	1000	NA	16	NA	NA	NA	NA	NA	NA
Dimethylphthalate	NE	NA	11	NA	NA	14	NA	NA	NA
Di-n-butylphthalate	700	NA	<10	NA	NA	15	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-21 6/21/2011	MW-21 5/1/2012	MW-21 6/19/2013
<u>Field Parameters</u>				
Temperature (°C)	NE	19.93	18.60	19.83
pH (standard units)	6.5 - 8.5	6.78	6.58	6.38
Dissolved Oxygen (mg/L)	NE	0.39	0.98	0.00
Specific Conductance (µS/cm)	NE	279	243	246
Oxidation-Reduction Potential (mV)	NE	74.1	-143.1	44.0
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<1300	<13000	<13000
Benzene	1	75 J	<500	<500
Carbon Tetrachloride	0.3	<50	<500	<500
1,2-Dichlorobenzene	20	<50	<500	<500
1,1-Dichloroethane	6	<50	<500	<500
1,1-Dichloroethene	350	84	1,500	1,200
cis-1,2-Dichloroethene	70	4,500	640	1,000
trans-1,2-Dichloroethene	100	<50	<500	<500
Ethylbenzene	600	<50	<500	<500
Methylene Chloride	5	<250	<2500	<2500
Tetrachloroethene	0.7	61	33,000	27,000
Toluene	600	<50	<500	<500
1,1,1-Trichloroethane	200	210	<500	<500
Trichloroethene	3	<50	8,500	6,500
Vinyl Chloride	0.03	<50	<500	<500
Xylenes (Total)	500	<100	<1000	<1000
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,2,4-Trichlorobenzene	70	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3	NA	NA	NA
Butylbenzyl phthalate	1000	NA	NA	NA
Dimethylphthalate	NE	NA	NA	NA
Di-n-butylphthalate	700	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-22 3/28/1996	MW-22 6/14/1999	MW-22 12/15/1999	MW-22 6/5/2001	MW-22 4/10/2007	MW-22 6/25/2008	MW-22 6/9/2009	MW-22 6/14/2010
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	NR	NR	18.80	19.55	18.79
pH (standard units)	6.5 - 8.5	NR	NR	NR	NR	NR	9.00	7.22	7.17
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	NR	NR	0.95	2.63	0.43
Specific Conductance (µS/cm)	NE	NR	NR	NR	NR	NR	300	161	178
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	NR	NR	90	94.2	-57
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<500	<120	<25	<25	<130	<500	<25	<120
Benzene	1	<100	<5	<1	<1	<5	<20	<1.0	<5.0
Carbon Tetrachloride	0.3	<100	<5	<1	<1	<5	<20	<5.0	<5.0
Chloroform	70	<100	<5	<1	1.2	<5	<20	<5.0	<5.0
1,1-Dichloroethane	6	480	6	3.5	7.2	5.1	<20	<5.0	<5.0
1,2-Dichloroethane	0.4	<100	<5	NA	1.2	<5	<20	<5.0	<5.0
1,1-Dichloroethene	350	1,300	180	42	300	160	180	10	35
cis-1,2-Dichloroethene	70	<100	<5	21	38	28	44	<5.0	13
Ethylbenzene	600	120	<5	<1	<1	<5	<20	<5.0	<5.0
Methylene Chloride	5	320	<5	<5	<5	<25	<100	<5.0	<25
Tetrachloroethene	0.7	1,900	580	46	1,300	910	1,300	56	340
Toluene	600	140	<5	1.4	<1	<5	<20	<5.0	<5.0
1,1,1-Trichloroethane	200	2,000	6.9	4.1	9.4	<5	<20	<5.0	<5.0
Trichloroethene	3	140	110	40	290	280	380	19	87
Vinyl Chloride	0.03	NA	NA	NA	NA	NA	<20	<5.0	<5.0
Xylenes (Total)	500	200	NA	<2	<2	<10	<40	<10	<10
<u>SVOCs (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	<10	<10	NA	NA	<10	NA	NA	NA
1,2-Dichlorobenzene	20	<10	<10	NA	NA	<10	NA	NA	NA
1,4-Dichlorobenzene	6	<10	<10	NA	NA	<10	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	<10	<10	NA	NA	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3	<10	40	NA	NA	<10	NA	NA	NA
Butyl benzyl phthalate	100	<10	80	NA	NA	<10	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-22 6/20/2011	MW-22 5/2/2012	MW-22 6/18/2013	MW-22 6/20/2014	MW-22 6/24/2015	MW-22 9/22/2016
<u>Field Parameters</u>							
Temperature (°C)	NE	19.28	18.56	23.20	18.76	21.10	20.4
pH (standard units)	6.5 - 8.5	7.63	6.45	6.69	5.71	5.34	5.99
Dissolved Oxygen (mg/L)	NE	0.69	0.46	1.15	7.88	0.46	0.0
Specific Conductance (µS/cm)	NE	258	267	279	275	246	189
Oxidation-Reduction Potential (mV)	NE	48.3	-111.2	-52.0	40.7	132.9	-15
<u>VOCs (USEPA Method 8260B) µg/L</u>							
Acetone	6,000	<b>220 J</b>	<b>210</b>	<25	<250	< 20	<100
Benzene	1	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
Carbon Tetrachloride	0.3	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
Chloroform	70	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
1,1-Dichloroethane	6	<b>4.0 J</b>	<2.0	<1.0	<10	<b>13</b>	<b>13</b>
1,2-Dichloroethane	0.4	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
1,1-Dichloroethene	350	<b>91 J</b>	<b>2.4</b>	<b>3.1</b>	<b>160</b>	<b>220</b>	<b>200</b>
cis-1,2-Dichloroethene	70	<b>740 J</b>	<b>11</b>	<b>8.6</b>	<b>220</b>	<b>330</b>	<b>490</b>
Ethylbenzene	600	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
Methylene Chloride	5	<5.0 UJ	<10	<5.0	<50	< 10	<50
Tetrachloroethene	0.7	<b>340 J</b>	<b>3.6</b>	<b>78.0</b>	<b>850</b>	<b>770</b>	<b>1,200</b>
Toluene	600	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
1,1,1-Trichloroethane	200	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
Trichloroethene	3	<b>110 J</b>	<b>2.5</b>	<b>7.0</b>	<b>400</b>	<b>360</b>	<b>560</b>
Vinyl Chloride	0.03	<1.0 UJ	<2.0	<1.0	<10	< 2.0	<10
Xylenes (Total)	500	<2.0 UJ	<4.0	<2.0	<20	< 2.0	<10
<u>SVOCs (USEPA Method 8270C) µg/L</u>							
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	100	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-22BR 6/21/2006	MW-22BR 12/7/2006	MW-22BR 4/10/2007	MW-22BR 6/25/2008	MW-22BR 12/8/2008	MW-22BR 6/9/2009	MW-22BR 12/29/2009	MW-22BR 6/14/2010
<u>Field Parameters</u>									
Temperature (°C)	NE	NR	NR	NR	18.84	14.41	19.19	16.38	20.23
pH (standard units)	6.5 - 8.5	NR	NR	NR	11.75	11.57	10.02	11.25	11.29
Dissolved Oxygen (mg/L)	NE	NR	NR	NR	0.61	1.63	1.78	0.16	0.16
Specific Conductance (µS/cm)	NE	NR	NR	NR	1140	882	792	885	837
Oxidation-Reduction Potential (mV)	NE	NR	NR	NR	-7	-80	4	-76	-122.3
<u>VOCs (USEPA Method 8260B) µg/L</u>									
Acetone	6,000	<50	<25	<25	<25	<50	<50	<25	<120
1,1-Dichloroethane	6	<b>6.3</b>	<b>4.7</b>	<b>5.9</b>	<b>6.0</b>	<b>5.6</b>	<10	<5.0	<b>5.1</b>
1,2-Dichloroethane	0.4	<5	<1	<1	<1.0	<2.0	<10	<5.0	<5.0
1,1-Dichloroethene	350	<b>130</b>	<b>130</b>	<b>120</b>	<b>120</b>	<b>140</b>	<b>100</b>	<b>90</b>	<b>110</b>
cis-1,2-Dichloroethene	70	<b>37</b>	<b>35</b>	<b>29</b>	<b>31</b>	<b>27</b>	<b>27</b>	<b>22</b>	<b>35</b>
Ethylbenzene	600	NA	NA	NA	NA	NA	<10	<5.0	<5.0
Methylene Chloride	5	<10	<5	<5	<5.0	<10	<10	<5.0	<25
Tetrachloroethene	0.7	<b>320</b>	<b>170</b>	<b>130</b>	<b>220</b>	<b>240</b>	<b>180</b>	<b>150</b>	<b>320</b>
Toluene	600	<5	<1	<1	<1.0	<2.0	<10	<5.0	<5.0
1,1,1-Trichloroethane	200	<5	<b>2.7</b>	<b>1.1</b>	<b>1.1</b>	<2.0	<10	<5.0	<5.0
Trichloroethene	3	<b>120</b>	<b>130</b>	<b>110</b>	<b>120</b>	<b>120</b>	<b>100</b>	<b>86</b>	<b>150</b>
Vinyl Chloride	0.03	<5	<1	<1	<b>1.1</b>	<2.0	<10	<5.0	<5.0
Xylenes (Total)	500	<4	<2	<2	<2.0	<4.0	<10	<10	<10
<u>SVOCS (USEPA Method 8270C) µg/L</u>									
1,2,4-Trichlorobenzene	70	<11	NA	<10	<9.4	NA	<9.4	NA	NA
1,2-Dichlorobenzene	20	<11	NA	<10	<9.4	NA	<9.4	NA	NA
1,4-Dichlorobenzene	6	<11	NA	<10	<9.4	NA	<9.4	NA	NA
2,4-Dimethylphenol	140	NA	NA	NA	<9.4	NA	<9.4	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-22BR 6/20/2011	MW-22BR 5/2/2012	MW-22BR 6/18/2013	MW-22BR 6/20/2014	MW-22BR 6/24/2015	MW-22BR 9/22/2016
<b>Field Parameters</b>							
Temperature (°C)	NE	18.39	20.50	20.24	18.36	22.20	22.5
pH (standard units)	6.5 - 8.5	10.97	11.43	10.44	11.63	11.07	10.93
Dissolved Oxygen (mg/L)	NE	0.82	0.44	0.19	6.24	0.36	0.0
Specific Conductance (µS/cm)	NE	899	1067	763	1034	1190	1083
Oxidation-Reduction Potential (mV)	NE	-98.4	-89.0	79.0	2.9	8.8	-34
<b>VOCs (USEPA Method 8260B) µg/L</b>							
Acetone	6,000	<25 UJ	<50	<50	<50	< 50	<b>28</b>
1,1-Dichloroethane	6	<b>3.1 J</b>	<b>6.7</b>	<b>6.8</b>	<b>6.1</b>	<b>7.6</b>	<b>9.4</b>
1,2-Dichloroethane	0.4	<1.0 UJ	<2.0	<2.0	<2.0	< 5.0	<20
1,1-Dichloroethene	350	<b>31</b>	<b>89</b>	<b>110</b>	<b>100</b>	<b>120</b>	<b>130</b>
cis-1,2-Dichloroethene	70	<b>14</b>	<b>29</b>	<b>36</b>	<b>33</b>	<b>36</b>	<b>57</b>
Ethylbenzene	600	<1.0 UJ	<2.0	<2.0	<2.0	< 5.0	<20
Methylene Chloride	5	<5.0 UJ	<10	<10	<10	< 25	<100
Tetrachloroethene	0.7	<b>110</b>	<b>250</b>	<b>330</b>	<b>200</b>	<b>350</b>	<b>370</b>
Toluene	600	<1.0 UJ	<2.0	<2.0	<2.0	< 5.0	<20
1,1,1-Trichloroethane	200	<1.0 UJ	<2.0	<2.0	<2.0	< 5.0	<20
Trichloroethene	3	<b>56</b>	<b>140</b>	<b>160</b>	<b>120</b>	<b>160</b>	<b>260</b>
Vinyl Chloride	0.03	<1.0 UJ	<2.0	<2.0	<2.0	< 5.0	<20
Xylenes (Total)	500	<2.0 UJ	<4.0	<4.0	<4.0	< 5.0	<20
<b>SVOCS (USEPA Method 8270C) µg/L</b>							
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	100	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-23S 8/25/2011	MW-23S 12/13/2011	MW-23S 5/1/2012	MW-23S 6/19/2013	MW-23S 6/20/2014	MW-23S 6/24/2015
<b>Field Parameters</b>							
Temperature (°C)	NE	22.37	19.62	20.08	25.17	20.28	25.41
pH (standard units)	6.5 - 8.5	5.14	4.95	4.94	4.72	5.02	5.14
Dissolved Oxygen (mg/L)	NE	6.60	7.6	6.94	6.53	16.87	5.90
Specific Conductance (µS/cm)	NE	59	93	86	86	81	57
Oxidation-Reduction Potential (mV)	NE	155.5	349	151.2	279.0	164.9	322.3
<b>VOCs (USEPA Method 8260B) µg/L</b>							
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Chloroform	70	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
1,4-Dichlorobenzene	6	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
1,1-Dichloroethene	350	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	<1.0	3	<1.0	< 1.0
trans-1,2-Dichloroethene	100	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0
Tetrachloroethene	0.7	<1.0	2.5	<1.0	<1.0	1.0	< 1.0
Toluene	600	<1.0	1.4	<1.0	<1.0	<1.0	< 1.0
1,1,1-Trichloroethane	200	<1.0	3.2	<1.0	<1.0	<1.0	< 1.0
Trichloroethene	3	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Vinyl Chloride	0.03	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0
Xylenes (Total)	500	<2.0	<2.0	<2.0	<2.0	<2.0	< 1.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>							
1,4-Dioxane	3	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	NA	NA	NA	NA	NA	NA
Naphthalene	6	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-23D 8/25/2011	MW-23D 12/13/2011	MW-23D 5/1/2012	MW-23D 6/20/2014	MW-23D 6/24/2015
<b>Field Parameters</b>						
Temperature (°C)	NE	24.78	NM	19.56	20.74	27.81
pH (standard units)	6.5 - 8.5	7.88	NM	9.33	7.60	8.58
Dissolved Oxygen (mg/L)	NE	1.00	NM	0.26	8.19	6.12
Specific Conductance (µS/cm)	NE	188	NM	480	182	164
Oxidation-Reduction Potential (mV)	NE	-285.3	NM	-123.7	39.6	160.4
<b>VOCs (USEPA Method 8260B) µg/L</b>						
Acetone	6,000	<25	<25	<25	<25	< 10
Benzene	1	<1.0	<1.0	<1.0	<1.0	< 1.0
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0	<1.0	< 1.0
Chloroform	70	<1.0	<1.0	<1.0	<1.0	< 1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0	<1.0	< 1.0
1,4-Dichlorobenzene	6	<1.0	<1.0	<1.0	<1.0	< 1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0	<1.0	< 1.0
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	< 1.0
1,1-Dichloroethene	350	<b>1.2</b>	<1.0	<1.0	<1.0	< 1.0
cis-1,2-Dichloroethene	70	<b>1.0</b>	<1.0	<1.0	<1.0	< 1.0
1,2-Dichloropropane	0.6	<1.0	<1.0	<1.0	<1.0	< 1.0
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0	< 1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	< 5.0
Tetrachloroethene	0.7	<b>3.4</b>	<1.0	<1.0	<1.0	< 1.0
Toluene	600	<1.0	<1.0	<1.0	<1.0	< 1.0
1,1,1-Trichloroethane	200	<1.0	<1.0	<1.0	<1.0	< 1.0
Trichloroethene	3	<b>3.6</b>	<1.0	<1.0	<1.0	< 1.0
Vinyl Chloride	0.03	<1.0	<1.0	<1.0	<1.0	< 1.0
Xylenes (Total)	500	<2.0	<2.0	<2.0	<2.0	< 1.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>						
1,4-Dioxane	3	<10	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA
Naphthalene	6	<10	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-24S 8/25/2011	MW-24S 12/13/2011	MW-24S 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	19.38	18.25	17.92
pH (standard units)	6.5 - 8.5	5.04	4.99	4.96
Dissolved Oxygen (mg/L)	NE	6.48	0.00	1.66
Specific Conductance (µS/cm)	NE	47	85	38
Oxidation-Reduction Potential (mV)	NE	167.2	213	68.9
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Benzene	1	<1.0	<1.0	<1.0
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0
Chloroform	70	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.6	3.6	3.0	2.9
Ethylbenzene	600	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10	<10
Methylene Chloride	5	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	4.7	2.8	<1.0
Toluene	600	1.7	1.3	<1.0
1,1,1-Trichloroethane	200	<1.0	2.9	<1.0
Trichloroethene	3	<1.0	<1.0	<1.0
Vinyl Chloride	0.03	<1.0	<1.0	<1.0
Xylenes (Total)	500	2.3	<2.0	<2.0
<u>SVOCS (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<10	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA
Naphthalene	6	<10	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-24D 8/25/2011	MW-24D 12/13/2011	MW-24D 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	23.61	16.88	17.95
pH (standard units)	6.5 - 8.5	7.09	6.68	6.41
Dissolved Oxygen (mg/L)	NE	0.99	0.00	0.85
Specific Conductance (µS/cm)	NE	205	191	110
Oxidation-Reduction Potential (mV)	NE	-258.6	-130	42.5
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Benzene	1	<1.0	2.0	<1.0
2-Butanone (MEK)	4,000	33	<10	<10
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0
Chloroform	70	16	1.6	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	1.1
1,2-Dichloropropane	0.6	9.8	12	8.4
Ethylbenzene	600	42	8.4	2.3
Methyl Isobutyl Ketone (MIBK)	NE	13	<10	<10
Methylene Chloride	5	6.4	<5.0	<5.0
Tetrachloroethene	0.7	4.0	5.4	1.3
Toluene	600	53	3.4	1.2
1,1,1-Trichloroethane	200	<1.0	6.1	<1.0
Trichloroethene	3	<1.0	1.4	<1.0
Vinyl Chloride	0.03	<1.0	<1.0	<1.0
Xylenes (Total)	500	260	210	24
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<9.9	NA	NA
1,2,4-Trichlorobenzene	70	<9.9	NA	NA
1,2-Dichlorobenzene	20	<9.9	NA	NA
1,4-Dichlorobenzene	6	<9.9	NA	NA
2,4-Dimethylphenol	100	16	NA	NA
Naphthalene	6	<9.9	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-25S 8/25/2011	MW-25S 12/14/2011	MW-25S 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	18.21	15.65	16.01
pH (standard units)	6.5 - 8.5	6.18	6.27	7.00
Dissolved Oxygen (mg/L)	NE	5.43	1.12	1.38
Specific Conductance (µS/cm)	NE	260	526	308
Oxidation-Reduction Potential (mV)	NE	152.6	213	-48.1
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<630	<25	<25
Benzene	1	<25	<1.0	<1.0
2-Butanone (MEK)	4,000	<250	<10	<10
Carbon Tetrachloride	0.3	<25	<1.0	<1.0
Chloroform	70	<25	5.1	5.3
1,2-Dichlorobenzene	20	<25	<1.0	<1.0
1,1-Dichloroethane	6	<25	<1.0	<1.0
1,1-Dichloroethene	350	<25	<1.0	<1.0
cis-1,2-Dichloroethene	70	<25	<1.0	<1.0
Ethylbenzene	600	<25	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<250	<10	<10
Methylene Chloride	5	<130	<5.0	<5.0
Tetrachloroethene	0.7	1,400	4.8	3.9
Toluene	600	<25	<1.0	<1.0
1,1,1-Trichloroethane	200	<25	<1.0	<1.0
Trichloroethene	3	<25	<1.0	<1.0
Vinyl Chloride	0.03	<25	<1.0	<1.0
Xylenes (Total)	500	<50	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<9.9	NA	NA
1,2,4-Trichlorobenzene	70	12	NA	NA
1,2-Dichlorobenzene	20	<9.9	NA	NA
1,4-Dichlorobenzene	6	<9.9	NA	NA
Naphthalene	6	<9.9	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-25D 8/25/2011	MW-25D 12/14/2011	MW-25D 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	21.32	15.71	16.56
pH (standard units)	6.5 - 8.5	7.43	4.13	5.43
Dissolved Oxygen (mg/L)	NE	2.42	2.64	1.87
Specific Conductance (µS/cm)	NE	337	340	206
Oxidation-Reduction Potential (mV)	NE	58.4	306	138.9
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<25	<25	<250
Benzene	1	<1.0	<1.0	<10
2-Butanone (MEK)	4,000	<10	<10	<10
Carbon Tetrachloride	0.3	<1.0	<1.0	<10
Chloroform	70	5.2	2.4	<10
1,2-Dichlorobenzene	20	1.5	4.1	<10
1,1-Dichloroethane	6	<1.0	<1.0	<10
1,1-Dichloroethene	350	<1.0	<1.0	<10
cis-1,2-Dichloroethene	70	<1.0	6.4	16
Ethylbenzene	600	<1.0	<1.0	<10
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10	<100
Methylene Chloride	5	<5.0	<5.0	<50
Tetrachloroethene	0.7	12	4,400	8,100
Toluene	600	2.5	<1.0	<10
1,1,1-Trichloroethane	200	<1.0	1.8	<10
Trichloroethene	3	1.2	4.5	<10
Vinyl Chloride	0.03	<1.0	<1.0	<10
Xylenes (Total)	500	2.6	<2.0	<20
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<11	NA	NA
1,2,4-Trichlorobenzene	70	<11	NA	NA
1,2-Dichlorobenzene	20	<11	NA	NA
1,4-Dichlorobenzene	6	<11	NA	NA
Naphthalene	6	<11	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-26S 8/25/2011	MW-26S 12/14/2011	MW-26S 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	18.83	17.18	17.85
pH (standard units)	6.5 - 8.5	5.28	6.57	5.94
Dissolved Oxygen (mg/L)	NE	3.18	1.14	1.71
Specific Conductance (µS/cm)	NE	174	265	168
Oxidation-Reduction Potential (mV)	NE	121.3	-13.0	-57.7
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<630	<630	<25
Benzene	1	<25	<25	<1.0
2-Butanone (MEK)	4,000	<250	<250	<10
Carbon Tetrachloride	0.3	<25	<25	<1.0
Chloroform	70	<25	<25	<1.0
1,2-Dichlorobenzene	20	<25	<25	<1.0
1,1-Dichloroethane	6	<25	<25	8.6
1,1-Dichloroethene	350	33	36	42
cis-1,2-Dichloroethene	70	140	230	180
Ethylbenzene	600	<25	<25	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<250	<250	<10
Methylene Chloride	5	<130	<130	<5.0
Tetrachloroethene	0.7	2,100	2,100	2,400
Toluene	600	<25	<25	<1.0
1,1,1-Trichloroethane	200	180	190	230 E
Trichloroethene	3	1,700	2,000	2,400
Vinyl Chloride	0.03	<25	<25	<1.0
Xylenes (Total)	500	<50	<50	<2.0
<u>SVOCS (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<10	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA
Naphthalene	6	<10	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-26D 8/25/2011	MW-26D 12/14/2011	MW-26D 5/3/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	19.79	16.22	16.34
pH (standard units)	6.5 - 8.5	5.94	5.29	6.41
Dissolved Oxygen (mg/L)	NE	4.40	0.79	1.59
Specific Conductance (µS/cm)	NE	312	434	281
Oxidation-Reduction Potential (mV)	NE	64.5	202	49.8
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<25	<25	<25
Benzene	1	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<10	<10	<10
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0
Chloroform	70	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	<1.0
Ethylbenzene	600	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10	<10
Methylene Chloride	5	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	5.7	1.3	<1.0
Toluene	600	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	<1.0	<1.0
Trichloroethene	3	1.6	<1.0	<1.0
Vinyl Chloride	0.03	<1.0	<1.0	<1.0
Xylenes (Total)	500	<2.0	<2.0	<2.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<9.8	NA	NA
1,2,4-Trichlorobenzene	70	<9.8	NA	NA
1,2-Dichlorobenzene	20	<9.8	NA	NA
1,4-Dichlorobenzene	6	<9.8	NA	NA
Naphthalene	6	<9.8	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-27S 4/11/2011	MW-27S 12/13/2011	MW-27S 5/2/2012	MW-27S 6/18/2013	MW-27S 12/10/2013	MW-27S 6/19/2014	MW-27S 12/17/2014	MW-27S 6/24/2015	MW-27S 12/10/2015
<b>Field Parameters</b>										
Temperature (°C)	NE	21.85	21.39	21.05	20.83	19.39	20.50	19.29	25.36	21.07
pH (standard units)	6.5 - 8.5	5.66	5.70	5.42	5.91	5.91	5.82	5.79	5.84	5.79
Dissolved Oxygen (mg/L)	NE	5.84	3.59	4.36	4.82	3.76	7.20	8.84	6.32	3.47
Specific Conductance (µS/cm)	NE	103	114	87	101	95	94	102	108	123
Oxidation-Reduction Potential (mV)	NE	135.9	252	114	203	-75.7	136.9	113	266.9	147.8
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	<120	<130	<130	<250	<250	<500	<100	< 100	< 100
Benzene	1	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
Carbon Tetrachloride	0.3	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
Chloroform	70	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
1,2-Dichlorobenzene	20	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
1,4-Dichlorobenzene	6	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<10	< 10	< 10
1,1-Dichloroethane	6	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
1,1-Dichloroethylene	350	58	46	81	71	88	58	54	91	64
cis-1,2-Dichloroethylene	70	12	13	23	31	35	33	25	66	44
Ethylbenzene	600	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
Methylene Chloride	5	<25	<25	<25	<50	<50	<100	<50	< 50	< 50
Tetrachloroethylene	0.7	620	740	950	1000	1000	830	660	1,200	860
Toluene	600	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
1,1,1-Trichloroethane	200	<5.0	11	<5.0	<10	<10	<20	<10	< 10	< 10
Trichloroethylene	3	350	340	540	450	500	370	290	550	390
Vinyl Chloride	0.03	<5.0	<5.0	<5.0	<10	<10	<20	<10	< 10	< 10
Xylenes (Total)	500	<10	<10	<10	<20	<20	<40	<20	< 10	< 10
<b>SVOCs (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	<2.0	NA	NA	NA	NA	3.4	NA	< 9.5	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	<0.97	NA	< 9.5	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA	<0.97	NA	< 9.5	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA	<0.97	NA	< 9.5	NA
Naphthalene	6	<10	NA	NA	NA	NA	<0.19	NA	< 9.5	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location:	NCAC 2L Standard	MW-27S 9/22/2016
<b>Field Parameters</b>		
Temperature (°C)	NE	22.4
pH (standard units)	6.5 - 8.5	5.95
Dissolved Oxygen (mg/L)	NE	2.5
Specific Conductance ( $\mu\text{S}/\text{cm}$ )	NE	108
Oxidation-Reduction Potential (mV)	NE	191
<b>VOCs (USEPA Method 8260B) <math>\mu\text{g}/\text{L}</math></b>		
Acetone	6,000	<100
Benzene	1	<10
Carbon Tetrachloride	0.3	<10
Chloroform	70	<10
1,2-Dichlorobenzene	20	<10
1,4-Dichlorobenzene	6	<10
1,1-Dichloroethane	6	<10
1,1-Dichloroethene	350	76
cis-1,2-Dichloroethene	70	71
Ethylbenzene	600	<10
Methylene Chloride	5	<50
Tetrachloroethene	0.7	1,100
Toluene	600	<10
1,1,1-Trichloroethane	200	<10
Trichloroethene	3	540
Vinyl Chloride	0.03	<10
Xylenes (Total)	500	<10
<b>SVOCs (USEPA Method 8270C) <math>\mu\text{g}/\text{L}</math></b>		
1,4-Dioxane	3	NA
1,2,4-Trichlorobenzene	70	NA
1,2-Dichlorobenzene	20	NA
1,4-Dichlorobenzene	6	NA
Naphthalene	6	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-27D 4/11/2011	MW-27D 12/13/2011	MW-27D 5/2/2012	MW-27D 6/20/2014	MW-27D 6/24/2015	MW-27D 9/22/2016
<b>Field Parameters</b>							
Temperature (°C)	NE	20.74	18.67	19.99	18.94	23.25	22.6
pH (standard units)	6.5 - 8.5	6.82	6.42	6.16	5.91	6.41	6.8
Dissolved Oxygen (mg/L)	NE	0.63	2.53	3.88	7.20	4.19	0.1
Specific Conductance (µS/cm)	NE	277	175	126	125	121	142
Oxidation-Reduction Potential (mV)	NE	35.5	192	68.7	85.3	98.6	79
<b>VOCs (USEPA Method 8260B) µg/L</b>							
Acetone	6,000	<250	<250	<250	<500	< 200	<200
Benzene	1	<10	<10	<10	<20	< 20	<20
Carbon Tetrachloride	0.3	<10	<10	<10	<20	< 20	<20
Chloroform	70	<10	<10	<10	<20	< 20	<20
1,2-Dichlorobenzene	20	<10	<10	<10	<20	< 20	<20
1,4-Dichlorobenzene	6	<10	<10	<10	<20	< 20	<20
1,1-Dichloroethane	6	<10	<10	<10	<20	< 20	<20
1,2-Dichloroethane	0.4	<10	<10	<10	<20	< 20	<20
1,1-Dichloroethene	350	120	110	190	150	180	130
cis-1,2-Dichloroethene	70	56	66	100	150	200	250
1,2-Dichloropropane	0.6	<10	<10	<10	<20	< 20	<20
Ethylbenzene	600	<10	<10	<10	<20	< 20	<20
Methylene Chloride	5	<50	<50	<50	<100	< 100	<20
Tetrachloroethene	0.7	1,300	1,700	1,700	1,700	1,700	1,200
Toluene	600	<10	<10	<10	<20	< 20	<20
1,1,1-Trichloroethane	200	<10	11	<10	<20	< 20	<20
Trichloroethene	3	690	790	970	770	820	860
Vinyl Chloride	0.03	<10	<10	<10	<20	< 20	<20
Xylenes (Total)	500	<20	<20	<20	<40	< 20	<20
<b>SVOCs (USEPA Method 8270C) µg/L</b>							
1,4-Dioxane	3	4.8	NA	NA	12.0	< 9.5	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	<1.0	< 9.5	NA
1,2-Dichlorobenzene	20	<10	NA	NA	<1.0	< 9.5	NA
1,4-Dichlorobenzene	6	<10	NA	NA	<1.0	< 9.5	NA
Naphthalene	6	<10	NA	NA	<0.20	< 9.5	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-28S 4/11/2011	MW-28S 12/13/2011	MW-28S 5/1/2012	MW-28S 6/18/2013
<b>Field Parameters</b>					
Temperature (°C)	NE	18.19	20.37	19.42	21.58
pH (standard units)	6.5 - 8.5	5.67	5.69	5.69	5.39
Dissolved Oxygen (mg/L)	NE	4.29	1.04	2.41	2.22
Specific Conductance (µS/cm)	NE	373	432	647	928
Oxidation-Reduction Potential (mV)	NE	158.8	208	113.7	202
<b>VOCs (USEPA Method 8260B) µg/L</b>					
Acetone	6,000	<25	<25	<25	<25
Benzene	1	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	4,000	<10	<10	<10	<10
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0	<1.0
Chloroform	70	<b>1.0</b>	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	350	<b>7.7</b>	<b>5.5</b>	<b>3.8</b>	<1.0
cis-1,2-Dichloroethene	70	<b>4.8</b>	<b>3.7</b>	<b>3.1</b>	<b>2.6</b>
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone (MIBK)	NE	<10	<10	<10	<10
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	0.7	<b>110</b>	<b>97</b>	<b>65</b>	<b>71</b>
Toluene	600	<1.0	<b>2.2</b>	<1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	<b>6.2</b>	<1.0	<1.0
Trichloroethene	3	<b>42</b>	<b>37</b>	<b>25</b>	<b>23</b>
Vinyl Chloride	0.03	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	500	<2.0	<2.0	<2.0	<2.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>					
1,4-Dioxane	3	<b>3.6</b>	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA
Naphthalene	6	<10	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-28D 4/11/2011	MW-28D 12/13/2011	MW-28D 5/1/2012
<u>Field Parameters</u>				
Temperature (°C)	NE	19.09	18.29	19.33
pH (standard units)	6.5 - 8.5	6.32	6.01	6.19
Dissolved Oxygen (mg/L)	NE	0.51	1.23	2.54
Specific Conductance (µS/cm)	NE	385	274	220
Oxidation-Reduction Potential (mV)	NE	42	252	77.5
<u>VOCs (USEPA Method 8260B) µg/L</u>				
Acetone	6,000	<120	<120	<250
Benzene	1	<5.0	<5.0	<10
2-Butanone (MEK)	4,000	<50	<50	<100
Carbon Tetrachloride	0.3	<5.0	<5.0	<10
Chloroform	70	<5.0	<5.0	<10
1,2-Dichlorobenzene	20	<5.0	<5.0	<10
1,1-Dichloroethane	6	<5.0	<5.0	<10
1,1-Dichloroethene	350	<b>57</b>	<b>53</b>	<b>65</b>
cis-1,2-Dichloroethene	70	<b>49</b>	<b>56</b>	<b>65</b>
Ethylbenzene	600	<5.0	<5.0	<10
Methyl Isobutyl Ketone (MIBK)	NE	<50	<50	<100
Methylene Chloride	5	<25	<25	<50
Tetrachloroethene	0.7	<b>660</b>	<b>910</b>	<b>960</b>
Toluene	600	<5.0	<5.0	<10
1,1,1-Trichloroethane	200	<5.0	<b>12</b>	<10
Trichloroethene	3	<b>340</b>	<b>380</b>	<b>410</b>
Vinyl Chloride	0.03	<5.0	<5.0	<10
Xylenes (Total)	500	<10	<10	<20
<u>SVOCs (USEPA Method 8270C) µg/L</u>				
1,4-Dioxane	3	<b>31</b>	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA
Naphthalene	6	<10	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-29S 4/11/2011	MW-29S 12/13/2011	MW-29S 5/2/2012	MW-29S 6/18/2013	MW-29S 12/9/2013	MW-29S 6/19/2014	MW-29S 12/17/2014	MW-29S 6/24/2015	MW-29S 12/10/2015
<b>Field Parameters</b>										
Temperature (°C)	NE	14.53	16.48	19.22	22.91	12.65	24.90	14.71	32.15	17.71
pH (standard units)	6.5 - 8.5	4.33	5.55	5.65	5.6	5.72	5.85	5.91	5.85	6.00
Dissolved Oxygen (mg/L)	NE	10.46	0.00	2.40	0.59	2.06	5.01	5.81	2.80	0.23
Specific Conductance (µS/cm)	NE	205	206	220	227	169	884	417	419	362
Oxidation-Reduction Potential (mV)	NE	247.6	-18	138.5	143	-66.9	69.4	58	135.7	58.2
<b>VOCs (USEPA Method 8260B) µg/L</b>										
Acetone	6,000	<25	<25	<25	<25	<25	<25	<10	< 10	< 10
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
Carbon Tetrachloride	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
Chloroform	70	<b>2.5</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
1,1-Dichloroethane	6	<b>2.2</b>	<b>1.2</b>	<1.0	<1.0	<b>1.7</b>	<1.0	<b>1.4</b>	<b>1.5</b>	<b>1.8</b>
1,1-Dichloroethene	350	<b>10</b>	<b>1.6</b>	<b>3.2</b>	<b>2.5</b>	<b>6.6</b>	<b>1.1</b>	<b>4.8</b>	<b>4.6</b>	<b>5.8</b>
cis-1,2-Dichloroethene	70	<b>17</b>	<b>7.6</b>	<b>6.4</b>	<b>6.5</b>	<b>15</b>	<b>2.9</b>	<b>11</b>	<b>11</b>	<b>17</b>
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	< 5.0
Tetrachloroethene	0.7	<b>72</b>	<b>44</b>	<b>31</b>	<b>80</b>	<b>63 J</b>	<b>20</b>	<b>62</b>	<b>50</b>	<b>72</b>
Toluene	600	<1.0	<b>1.8</b>	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	200	<1.0	<b>3.7</b>	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
Trichloroethene	3	<b>28</b>	<b>17</b>	<b>12</b>	<b>13</b>	<b>24</b>	<b>5.2</b>	<b>22</b>	<b>18</b>	<b>29</b>
Vinyl Chloride	0.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0
Xylenes (Total)	500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 1.0	< 1.0
<b>SVOCS (USEPA Method 8270C) µg/L</b>										
1,4-Dioxane	3	<b>7.6</b>	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	6	<10	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility

Sample Location: Date Sampled:	NCAC 2L Standard	MW-29S 9/22/2016
<b>Field Parameters</b>		
Temperature (°C)	NE	27.1
pH (standard units)	6.5 - 8.5	5.73
Dissolved Oxygen (mg/L)	NE	0.0
Specific Conductance (µS/cm)	NE	1030
Oxidation-Reduction Potential (mV)	NE	-1.8
<b>VOCs (USEPA Method 8260B) µg/L</b>		
Acetone	6,000	<10
Benzene	1	<1.0
Carbon Tetrachloride	0.3	<1.0
Chloroform	70	<1.0
1,2-Dichlorobenzene	20	<1.0
1,1-Dichloroethane	6	1.8
1,1-Dichloroethene	350	8.1
cis-1,2-Dichloroethene	70	17
Ethylbenzene	600	<1.0
Methylene Chloride	5	<5.0
Tetrachloroethene	0.7	80
Toluene	600	<1.0
1,1,1-Trichloroethane	200	<1.0
Trichloroethene	3	32
Vinyl Chloride	0.0	<1.0
Xylenes (Total)	500	<1.0
<b>SVOCs (USEPA Method 8270C) µg/L</b>		
1,4-Dioxane	3	NA
1,2,4-Trichlorobenzene	70	NA
1,2-Dichlorobenzene	20	NA
1,4-Dichlorobenzene	6	NA
Naphthalene	6	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-29D 4/11/2011	MW-29D 12/13/2011	MW-29D 5/2/2012	MW-29D 6/19/2013	MW-29D 6/19/2014	MW-29D 6/24/2015	MW-29D 9/22/2016
<b>Field Parameters</b>								
Temperature (°C)	NE	15.95	18.56	19.01	28.37	19.49	27.82	24.3
pH (standard units)	6.5 - 8.5	5.62	5.79	5.90	5.80	5.70	5.92	5.72
Dissolved Oxygen (mg/L)	NE	8.07	0.10	0.35	1.53	6.02	2.68	0.0
Specific Conductance (µS/cm)	NE	223	217	205	183	184	259	166
Oxidation-Reduction Potential (mV)	NE	188.7	202	82.7	156	77.5	123.4	185
<b>VOCs (USEPA Method 8260B) µg/L</b>								
Acetone	6,000	<25	<50	<50	<50	<130	< 50	<50
Benzene	1	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
Carbon Tetrachloride	0.3	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
Chloroform	70	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
1,2-Dichlorobenzene	20	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
1,4-Dichlorobenzene	6	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
1,1-Dichloroethane	6	<b>5.2</b>	<b>5.8</b>	<2.0	<b>5.2</b>	<b>6.6</b>	<b>6.7</b>	<b>8.0</b>
1,2-Dichloroethane	0.4	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
1,1-Dichloroethene	350	<b>27</b>	<b>24</b>	<b>43</b>	<b>17</b>	<b>31</b>	<b>35</b>	<b>39</b>
cis-1,2-Dichloroethene	70	<b>42</b>	<b>42</b>	<b>59</b>	<b>48</b>	<b>61</b>	<b>65</b>	<b>81</b>
1,2-Dichloropropane	0.6	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
Ethylbenzene	600	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
Methylene Chloride	5	<5.0	<10	<10	<10	<25	< 25	<25
Tetrachloroethene	0.7	<b>160</b>	<b>220</b>	<b>240</b>	<b>220</b>	<b>290</b>	<b>290</b>	<b>390</b>
Toluene	600	<1.0	<b>6.1</b>	<2.0	<2.0	<5.0	< 5.0	<5.0
1,1,1-Trichloroethane	200	<1.0	<b>16</b>	<2.0	<2.0	<5.0	< 5.0	<5.0
Trichloroethene	3	<b>59</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>100</b>	<b>110</b>	<b>160</b>
Vinyl Chloride	0.03	<1.0	<2.0	<2.0	<2.0	<5.0	< 5.0	<5.0
Xylenes (Total)	500	<2.0	<4.0	<4.0	<4.0	<10	< 5.0	<10
<b>SVOCS (USEPA Method 8270C) µg/L</b>								
1,4-Dioxane	3	<b>13</b>	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA	NA	NA
Naphthalene	6	<10	NA	NA	NA	NA	NA	NA

Notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-29BR* 6/29/2012	MW-29BR 6/19/2013
<b>Field Parameters</b>			
Temperature (°C)	NE	NM	19.44
pH (standard units)	6.5 - 8.5	NM	6.36
Dissolved Oxygen (mg/L)	NE	NM	0.00
Specific Conductance (µS/cm)	NE	NM	346
Oxidation-Reduction Potential (mV)	NE	NM	130
<b>VOCs (USEPA Method 8260B) µg/L</b>			
Acetone	6,000	<130	<130
Carbon Tetrachloride	0.3	<5.0	<5.0
Chloroform	70	<5.0	<5.0
1,2-Dichlorobenzene	20	<5.0	<5.0
1,1-Dichloroethane	6	15	11
1,2-Dichloroethane	0.4	<5.0	<5.0
1,1-Dichloroethene	350	110	100
cis-1,2-Dichloroethene	70	130	130
1,2-Dichloropropane	0.6	<5.0	<5.0
Ethylbenzene	600	<5.0	<5.0
Methylene Chloride	5	<25	<25
Tetrachloroethene	0.7	290	360
Toluene	600	<5.0	<5.0
1,1,1-Trichloroethane	200	<5.0	<5.0
Trichloroethene	3	170	190
Vinyl Chloride	0.03	7.7	5.2
Xylenes (Total)	500	<10	<10
<b>SVOCs (USEPA Method 8270C) µg/L</b>			
1,4-Dioxane	3	NA	NA
1,2,4-Trichlorobenzene	70	NA	NA
1,2-Dichlorobenzene	20	NA	NA
1,4-Dichlorobenzene	6	NA	NA
3-Methylphenol/4-Methylphenol	400/40	NA	NA
Dimethylphthalate	NE	NA	NA
Naphthalene	6	NA	NA
Phenol	30	NA	NA

Notes:

\* Groundwater sample was collected from a depth interval of 79 to 87 ft bgs in the open boring prior to well installation  
Additional notes are presented on the last page of the table.

Table A1. Summary of Historical Groundwater Analytical Results (Detects Only), Former Ashland Distribution Facility, Greensboro, NC

Sample Location: Date Sampled:	NCAC 2L Standard	MW-30 4/11/2011	MW-30 12/13/2011	MW-30 4/30/2012	MW-30 6/18/2013	MW-30 6/19/2014	MW-30 6/24/2015	MW-30 9/22/2016
<u>Field Parameters</u>								
Temperature (°C)	NE	16.89	19.83	18.77	19.61	20.45	24.15	25.6
pH (standard units)	6.5 - 8.5	5.53	5.73	5.64	5.32	5.30	5.33	5.65
Dissolved Oxygen (mg/L)	NE	2.76	0.00	0.13	0.00	6.42	3.59	0.0
Specific Conductance (µS/cm)	NE	407	417	446	452	420	264	362
Oxidation-Reduction Potential (mV)	NE	171.1	138	68	59	89.7	84.1	130
<u>VOCs (USEPA Method 8260B) µg/L</u>								
Acetone	6,000	<25	<25	<25	<25	<25	< 10	<25
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
1,1-Dichloroethane	6	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
1,2-Dichloroethane	0.4	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
1,1-Dichloroethene	350	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
cis-1,2-Dichloroethene	70	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
Ethylbenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	<5.0
Tetrachloroethene	0.7	6.0	14	6.2	6.4	2.8	7.3	11.0
Toluene	600	<1.0	3.4	<1.0	<1.0	<1.0	< 1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	9.9	<1.0	<1.0	<1.0	< 1.0	<1.0
Trichloroethene	3	2.8	5.6	3.3	3.2	1.2	3.4	5.3
Vinyl Chloride	0.03	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0
Xylenes (Total)	500	<2.0	2.3	<2.0	<2.0	<2.0	< 1.0	<1.0
<u>SVOCs (USEPA Method 8270C) µg/L</u>								
1,4-Dioxane	3	<2.0	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	<10	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	20	<10	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	6	<10	NA	NA	NA	NA	NA	NA
Naphthalene	6	<10	NA	NA	NA	NA	NA	NA

Notes:

NCAC 2L Title 15A North Carolina Administrative Code Subchapter 2L Groundwater Quality Standards.

mg/L Milligrams per liter

NE No Standard exists for the constituent

µS/cm Microseimens per centimeter

NR Not Recorded

mV Millivolts

USEPA United States Environmental Protection Agency.

µg/L Micrograms per liter.

Shaded value exceeds the NCAC 2L Standard.

VOCs Volatile organic compounds

J / UJ Compound concentration is qualified as estimated (detected / nondetect).

SVOCs Semivolatile organic compounds

UB Compound concentration qualified as nondetect due to associated blank contamination.

NA Not analyzed or historic data not available

D Surrogate recoveries were not obtained because the extract was diluted for analysis

**Attachment 4****Analytical Laboratory Data Reports**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-122921-1

Client Project/Site: Ashland Greensboro Monitoring Wells

For:

ARCADIS U.S., Inc.

801 Corporate Center Drive

Suite 300

Raleigh, North Carolina 27607-5073

Attn: Mr. Don Malone

*Kathryn Smith*

Authorized for release by:

3/24/2016 10:20:15 AM

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### LINKS

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

**Job ID: 680-122921-1**

**Laboratory: TestAmerica Savannah**

Narrative

## CASE NARRATIVE

**Client: ARCADIS U.S., Inc.**

**Project: Ashland Greensboro Monitoring Wells**

**Report Number: 680-122921-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 03/11/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

### VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SW-3 (680-122921-1), SW-4 (680-122921-2), SW-5 (680-122921-3), SW-6 (680-122921-4) and Trip Blank 1 (680-122921-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/22/2016.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-426058.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-122921-1	SW-3	Water	03/10/16 11:05	03/11/16 10:55
680-122921-2	SW-4	Water	03/10/16 11:10	03/11/16 10:55
680-122921-3	SW-5	Water	03/10/16 11:30	03/11/16 10:55
680-122921-4	SW-6	Water	03/10/16 11:45	03/11/16 10:55
680-122921-7	Trip Blank 1	Water	03/10/16 00:00	03/11/16 10:55

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TestAmerica Savannah

## Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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# Definitions/Glossary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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# Detection Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Client Sample ID: SW-3

## Lab Sample ID: 680-122921-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.9		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	6.1		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	11		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	6.7		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-4

## Lab Sample ID: 680-122921-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.6		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	7.7		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	11		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	6.6		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-5

## Lab Sample ID: 680-122921-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.9		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethane	1.0		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	10		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	60		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	24		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-6

## Lab Sample ID: 680-122921-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethane	1.8		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	43		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	55		1.0		ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	5.9		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	31		1.0		ug/L	1		8260B	Total/NA
Vinyl chloride	1.4		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: Trip Blank 1

## Lab Sample ID: 680-122921-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

**Client Sample ID: SW-3**

Date Collected: 03/10/16 11:05

Date Received: 03/11/16 10:55

**Lab Sample ID: 680-122921-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 17:21	1
Benzene	<1.0		1.0		ug/L			03/22/16 17:21	1
Bromoform	<1.0		1.0		ug/L			03/22/16 17:21	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 17:21	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 17:21	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 17:21	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 17:21	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 17:21	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 17:21	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 17:21	1
Chloroform	<1.0		1.0		ug/L			03/22/16 17:21	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 17:21	1
<b>cis-1,2-Dichloroethene</b>	<b>3.9</b>		1.0		ug/L			03/22/16 17:21	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 17:21	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 17:21	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 17:21	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 17:21	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/22/16 17:21	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 17:21	1
<b>1,1-Dichloroethene</b>	<b>6.1</b>		1.0		ug/L			03/22/16 17:21	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 17:21	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 17:21	1
2-Hexanone	<10		10		ug/L			03/22/16 17:21	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 17:21	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 17:21	1
Styrene	<1.0		1.0		ug/L			03/22/16 17:21	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 17:21	1
<b>Tetrachloroethene</b>	<b>11</b>		1.0		ug/L			03/22/16 17:21	1
Toluene	<1.0		1.0		ug/L			03/22/16 17:21	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 17:21	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 17:21	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/22/16 17:21	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 17:21	1
<b>Trichloroethene</b>	<b>6.7</b>		1.0		ug/L			03/22/16 17:21	1
Vinyl chloride	<1.0		1.0		ug/L			03/22/16 17:21	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		03/22/16 17:21	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		03/22/16 17:21	1
Dibromofluoromethane (Surr)	103		70 - 130		03/22/16 17:21	1
4-Bromofluorobenzene (Surr)	102		70 - 130		03/22/16 17:21	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

**Client Sample ID: SW-4**

Date Collected: 03/10/16 11:10

Date Received: 03/11/16 10:55

**Lab Sample ID: 680-122921-2**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 17:44	1
Benzene	<1.0		1.0		ug/L			03/22/16 17:44	1
Bromoform	<1.0		1.0		ug/L			03/22/16 17:44	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 17:44	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 17:44	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 17:44	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 17:44	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 17:44	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 17:44	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 17:44	1
Chloroform	<1.0		1.0		ug/L			03/22/16 17:44	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 17:44	1
<b>cis-1,2-Dichloroethene</b>	<b>3.6</b>		1.0		ug/L			03/22/16 17:44	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 17:44	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 17:44	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 17:44	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 17:44	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/22/16 17:44	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 17:44	1
<b>1,1-Dichloroethene</b>	<b>7.7</b>		1.0		ug/L			03/22/16 17:44	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 17:44	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 17:44	1
2-Hexanone	<10		10		ug/L			03/22/16 17:44	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 17:44	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 17:44	1
Styrene	<1.0		1.0		ug/L			03/22/16 17:44	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 17:44	1
<b>Tetrachloroethene</b>	<b>11</b>		1.0		ug/L			03/22/16 17:44	1
Toluene	<1.0		1.0		ug/L			03/22/16 17:44	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 17:44	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 17:44	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/22/16 17:44	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 17:44	1
<b>Trichloroethene</b>	<b>6.6</b>		1.0		ug/L			03/22/16 17:44	1
Vinyl chloride	<1.0		1.0		ug/L			03/22/16 17:44	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		70 - 130		03/22/16 17:44	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		03/22/16 17:44	1
Dibromofluoromethane (Surr)	103		70 - 130		03/22/16 17:44	1
4-Bromofluorobenzene (Surr)	100		70 - 130		03/22/16 17:44	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

**Client Sample ID: SW-5**

Date Collected: 03/10/16 11:30

Date Received: 03/11/16 10:55

**Lab Sample ID: 680-122921-3**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 18:07	1
Benzene	<1.0		1.0		ug/L			03/22/16 18:07	1
Bromoform	<1.0		1.0		ug/L			03/22/16 18:07	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 18:07	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 18:07	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 18:07	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 18:07	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 18:07	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 18:07	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 18:07	1
Chloroform	<1.0		1.0		ug/L			03/22/16 18:07	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 18:07	1
<b>cis-1,2-Dichloroethene</b>	<b>6.9</b>		1.0		ug/L			03/22/16 18:07	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 18:07	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 18:07	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 18:07	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 18:07	1
<b>1,1-Dichloroethane</b>	<b>1.0</b>		1.0		ug/L			03/22/16 18:07	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 18:07	1
<b>1,1-Dichloroethene</b>	<b>10</b>		1.0		ug/L			03/22/16 18:07	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 18:07	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 18:07	1
2-Hexanone	<10		10		ug/L			03/22/16 18:07	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 18:07	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 18:07	1
Styrene	<1.0		1.0		ug/L			03/22/16 18:07	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 18:07	1
<b>Tetrachloroethene</b>	<b>60</b>		1.0		ug/L			03/22/16 18:07	1
Toluene	<1.0		1.0		ug/L			03/22/16 18:07	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 18:07	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 18:07	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/22/16 18:07	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 18:07	1
<b>Trichloroethene</b>	<b>24</b>		1.0		ug/L			03/22/16 18:07	1
Vinyl chloride	<1.0		1.0		ug/L			03/22/16 18:07	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		70 - 130		03/22/16 18:07	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		03/22/16 18:07	1
Dibromofluoromethane (Surr)	102		70 - 130		03/22/16 18:07	1
4-Bromofluorobenzene (Surr)	102		70 - 130		03/22/16 18:07	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

**Client Sample ID: SW-6**

Date Collected: 03/10/16 11:45

Date Received: 03/11/16 10:55

**Lab Sample ID: 680-122921-4**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 18:30	1
Benzene	<1.0		1.0		ug/L			03/22/16 18:30	1
Bromoform	<1.0		1.0		ug/L			03/22/16 18:30	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 18:30	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 18:30	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 18:30	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 18:30	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 18:30	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 18:30	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 18:30	1
Chloroform	<1.0		1.0		ug/L			03/22/16 18:30	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>cis-1,2-Dichloroethene</b>	<b>11</b>		1.0		ug/L			03/22/16 18:30	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 18:30	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 18:30	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 18:30	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>1,1-Dichloroethane</b>	<b>1.8</b>		1.0		ug/L			03/22/16 18:30	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>1,1-Dichloroethene</b>	<b>43</b>		1.0		ug/L			03/22/16 18:30	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 18:30	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 18:30	1
2-Hexanone	<10		10		ug/L			03/22/16 18:30	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 18:30	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 18:30	1
Styrene	<1.0		1.0		ug/L			03/22/16 18:30	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>Tetrachloroethene</b>	<b>55</b>		1.0		ug/L			03/22/16 18:30	1
Toluene	<1.0		1.0		ug/L			03/22/16 18:30	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 18:30	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>1,1,1-Trichloroethane</b>	<b>5.9</b>		1.0		ug/L			03/22/16 18:30	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>Trichloroethene</b>	<b>31</b>		1.0		ug/L			03/22/16 18:30	1
<b>Vinyl chloride</b>	<b>1.4</b>		1.0		ug/L			03/22/16 18:30	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 18:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	100		70 - 130				03/22/16 18:30	1	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				03/22/16 18:30	1	
Dibromofluoromethane (Surr)	101		70 - 130				03/22/16 18:30	1	
4-Bromofluorobenzene (Surr)	101		70 - 130				03/22/16 18:30	1	

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Client Sample ID: Trip Blank 1

Date Collected: 03/10/16 00:00

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-7

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 16:58	1
Benzene	<1.0		1.0		ug/L			03/22/16 16:58	1
Bromoform	<1.0		1.0		ug/L			03/22/16 16:58	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 16:58	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 16:58	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 16:58	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 16:58	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 16:58	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 16:58	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 16:58	1
Chloroform	<1.0		1.0		ug/L			03/22/16 16:58	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 16:58	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 16:58	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 16:58	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 16:58	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 16:58	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 16:58	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/22/16 16:58	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 16:58	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/22/16 16:58	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 16:58	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 16:58	1
2-Hexanone	<10		10		ug/L			03/22/16 16:58	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 16:58	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 16:58	1
Styrene	<1.0		1.0		ug/L			03/22/16 16:58	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 16:58	1
Tetrachloroethene	<1.0		1.0		ug/L			03/22/16 16:58	1
Toluene	<1.0		1.0		ug/L			03/22/16 16:58	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 16:58	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 16:58	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/22/16 16:58	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 16:58	1
Trichloroethene	<1.0		1.0		ug/L			03/22/16 16:58	1
Vinyl chloride	<1.0		1.0		ug/L			03/22/16 16:58	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		03/22/16 16:58	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		03/22/16 16:58	1
Dibromofluoromethane (Surr)	102		70 - 130		03/22/16 16:58	1
4-Bromofluorobenzene (Surr)	102		70 - 130		03/22/16 16:58	1

TestAmerica Savannah

# Surrogate Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TOL (70-130)	12DCE (70-130)	DBFM (70-130)	BFB (70-130)				
680-122921-1	SW-3	101	102	103	102				
680-122921-2	SW-4	102	100	103	100				
680-122921-3	SW-5	102	102	102	102				
680-122921-4	SW-6	100	101	101	101				
680-122921-7	Trip Blank 1	101	103	102	102				
LCS 680-426058/5	Lab Control Sample	98	100	100	100				
LCSD 680-426058/6	Lab Control Sample Dup	86	97	98	97				
MB 680-426058/10	Method Blank	101	103	102	102				

### Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 680-426058/10**

**Matrix: Water**

**Analysis Batch: 426058**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			03/22/16 12:00	1
Benzene	<1.0		1.0		ug/L			03/22/16 12:00	1
Bromoform	<1.0		1.0		ug/L			03/22/16 12:00	1
Bromomethane	<5.0		5.0		ug/L			03/22/16 12:00	1
2-Butanone (MEK)	<10		10		ug/L			03/22/16 12:00	1
Carbon disulfide	<2.0		2.0		ug/L			03/22/16 12:00	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/22/16 12:00	1
Chlorobenzene	<1.0		1.0		ug/L			03/22/16 12:00	1
Chlorodibromomethane	<1.0		1.0		ug/L			03/22/16 12:00	1
Chloroethane	<5.0		5.0		ug/L			03/22/16 12:00	1
Chloroform	<1.0		1.0		ug/L			03/22/16 12:00	1
Chloromethane	<1.0		1.0		ug/L			03/22/16 12:00	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 12:00	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 12:00	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 12:00	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/22/16 12:00	1
Dichlorobromomethane	<1.0		1.0		ug/L			03/22/16 12:00	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/22/16 12:00	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/22/16 12:00	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/22/16 12:00	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/22/16 12:00	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/16 12:00	1
2-Hexanone	<10		10		ug/L			03/22/16 12:00	1
Methylene Chloride	<5.0		5.0		ug/L			03/22/16 12:00	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			03/22/16 12:00	1
Styrene	<1.0		1.0		ug/L			03/22/16 12:00	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/22/16 12:00	1
Tetrachloroethene	<1.0		1.0		ug/L			03/22/16 12:00	1
Toluene	<1.0		1.0		ug/L			03/22/16 12:00	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/22/16 12:00	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			03/22/16 12:00	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/22/16 12:00	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			03/22/16 12:00	1
Trichloroethene	<1.0		1.0		ug/L			03/22/16 12:00	1
Vinyl chloride	<1.0		1.0		ug/L			03/22/16 12:00	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/16 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		03/22/16 12:00	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		03/22/16 12:00	1
Dibromofluoromethane (Surr)	102		70 - 130		03/22/16 12:00	1
4-Bromofluorobenzene (Surr)	102		70 - 130		03/22/16 12:00	1

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 680-426058/5**

**Matrix: Water**

**Analysis Batch: 426058**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	266		ug/L	106	60 - 154	
Benzene	50.0	50.2		ug/L	100	73 - 131	
Bromoform	50.0	58.9		ug/L	118	69 - 135	
Bromomethane	50.0	43.8		ug/L	88	20 - 180	
2-Butanone (MEK)	250	256		ug/L	102	75 - 133	
Carbon disulfide	50.0	49.3		ug/L	99	73 - 127	
Carbon tetrachloride	50.0	50.4		ug/L	101	75 - 130	
Chlorobenzene	50.0	47.7		ug/L	95	80 - 120	
Chlorodibromomethane	50.0	49.9		ug/L	100	71 - 136	
Chloroethane	50.0	49.9		ug/L	100	50 - 151	
Chloroform	50.0	49.6		ug/L	99	79 - 122	
Chloromethane	50.0	48.4		ug/L	97	63 - 126	
cis-1,2-Dichloroethene	50.0	49.9		ug/L	100	80 - 122	
cis-1,3-Dichloropropene	50.0	52.2		ug/L	104	80 - 133	
1,2-Dichlorobenzene	50.0	45.7		ug/L	91	80 - 120	
1,4-Dichlorobenzene	50.0	48.0		ug/L	96	80 - 120	
Dichlorobromomethane	50.0	51.8		ug/L	104	77 - 129	
1,1-Dichloroethane	50.0	47.5		ug/L	95	80 - 120	
1,2-Dichloroethane	50.0	50.4		ug/L	101	75 - 130	
1,1-Dichloroethene	50.0	56.9		ug/L	114	74 - 125	
1,2-Dichloropropane	50.0	53.0		ug/L	106	80 - 123	
Ethylbenzene	50.0	52.0		ug/L	104	80 - 120	
2-Hexanone	250	253		ug/L	101	70 - 141	
Methylene Chloride	50.0	51.0		ug/L	102	76 - 129	
4-Methyl-2-pentanone (MIBK)	250	237		ug/L	95	75 - 135	
Styrene	50.0	57.3		ug/L	115	80 - 122	
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L	97	72 - 128	
Tetrachloroethene	50.0	48.4		ug/L	97	77 - 123	
Toluene	50.0	50.4		ug/L	101	80 - 122	
trans-1,2-Dichloroethene	50.0	49.8		ug/L	100	78 - 123	
trans-1,3-Dichloropropene	50.0	52.3		ug/L	105	74 - 140	
1,1,1-Trichloroethane	50.0	49.8		ug/L	100	74 - 128	
1,1,2-Trichloroethane	50.0	47.5		ug/L	95	79 - 125	
Trichloroethene	50.0	52.8		ug/L	106	80 - 123	
Vinyl chloride	50.0	45.4		ug/L	91	68 - 132	
Xylenes, Total	100	110		ug/L	110	80 - 120	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 680-426058/6**

**Matrix: Water**

**Analysis Batch: 426058**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	250	288		ug/L	115	60 - 154	8	40	
Benzene	50.0	49.3		ug/L	99	73 - 131	2	30	
Bromoform	50.0	59.4		ug/L	119	69 - 135	1	20	
Bromomethane	50.0	47.7		ug/L	95	20 - 180	8	40	
2-Butanone (MEK)	250	266		ug/L	107	75 - 133	4	30	
Carbon disulfide	50.0	41.9		ug/L	84	73 - 127	16	20	
Carbon tetrachloride	50.0	49.0		ug/L	98	75 - 130	3	20	
Chlorobenzene	50.0	48.4		ug/L	97	80 - 120	2	20	
Chlorodibromomethane	50.0	45.5		ug/L	91	71 - 136	9	20	
Chloroethane	50.0	49.2		ug/L	98	50 - 151	1	30	
Chloroform	50.0	48.1		ug/L	96	79 - 122	3	20	
Chloromethane	50.0	47.8		ug/L	96	63 - 126	1	30	
cis-1,2-Dichloroethene	50.0	48.0		ug/L	96	80 - 122	4	20	
cis-1,3-Dichloropropene	50.0	47.0		ug/L	94	80 - 133	10	20	
1,2-Dichlorobenzene	50.0	54.1		ug/L	108	80 - 120	17	20	
1,4-Dichlorobenzene	50.0	49.3		ug/L	99	80 - 120	3	20	
Dichlorobromomethane	50.0	48.4		ug/L	97	77 - 129	7	20	
1,1-Dichloroethane	50.0	46.4		ug/L	93	80 - 120	2	20	
1,2-Dichloroethane	50.0	49.0		ug/L	98	75 - 130	3	20	
1,1-Dichloroethene	50.0	57.2		ug/L	114	74 - 125	1	20	
1,2-Dichloropropane	50.0	47.8		ug/L	96	80 - 123	10	20	
Ethylbenzene	50.0	51.1		ug/L	102	80 - 120	2	20	
2-Hexanone	250	233		ug/L	93	70 - 141	9	40	
Methylene Chloride	50.0	45.4		ug/L	91	76 - 129	12	20	
4-Methyl-2-pentanone (MIBK)	250	217		ug/L	87	75 - 135	9	30	
Styrene	50.0	56.5		ug/L	113	80 - 122	1	20	
1,1,2,2-Tetrachloroethane	50.0	53.1		ug/L	106	72 - 128	9	20	
Tetrachloroethene	50.0	43.7		ug/L	87	77 - 123	10	20	
Toluene	50.0	44.8		ug/L	90	80 - 122	12	20	
trans-1,2-Dichloroethene	50.0	49.2		ug/L	98	78 - 123	1	20	
trans-1,3-Dichloropropene	50.0	47.9		ug/L	96	74 - 140	9	20	
1,1,1-Trichloroethane	50.0	48.0		ug/L	96	74 - 128	4	20	
1,1,2-Trichloroethane	50.0	42.7		ug/L	85	79 - 125	11	20	
Trichloroethene	50.0	47.8		ug/L	96	80 - 123	10	20	
Vinyl chloride	50.0	46.0		ug/L	92	68 - 132	1	30	
Xylenes, Total	100	108		ug/L	108	80 - 120	2	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	86		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130

TestAmerica Savannah

# Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Client Sample ID: SW-3

Date Collected: 03/10/16 11:05

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426058	03/22/16 17:21	DAS	TAL SAV

## Client Sample ID: SW-4

Date Collected: 03/10/16 11:10

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426058	03/22/16 17:44	DAS	TAL SAV

## Client Sample ID: SW-5

Date Collected: 03/10/16 11:30

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426058	03/22/16 18:07	DAS	TAL SAV

## Client Sample ID: SW-6

Date Collected: 03/10/16 11:45

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426058	03/22/16 18:30	DAS	TAL SAV

## Client Sample ID: Trip Blank 1

Date Collected: 03/10/16 00:00

Date Received: 03/11/16 10:55

## Lab Sample ID: 680-122921-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	426058	03/22/16 16:58	DAS	TAL SAV

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

Charlotte Service Center

TestAmerica

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

**TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

Serial Number 105505

 **TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Serial Number **105505**

Website: [www.testamericaainc.com](http://www.testamericaainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

THE LEADER IN ENVIRONMENTAL TESTING

REQUEST REFERENCE NO#	PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS		PAGE
				STANDARD REPORT	EXPEDITED REPORT	
OH00800-NC08-15400	08001233	NC		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 OF 1
CLIENT (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	DATE DUE _____
JERRY LANIER	N/A			<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXPEDITED REPORT DELIVERY (SURCHARGE)
CLIENT SITE PM	CLIENT PHONE	CLIENT FAX		<input type="checkbox"/>	<input checked="" type="checkbox"/>	DATE DUE _____
Ryan Gerber	—	—		<input checked="" type="checkbox"/>	<input type="checkbox"/>	NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1
CLIENT NAME	CLIENT E-MAIL					
ARCADIS	rgerber@arcadis-us.com					
CLIENT ADDRESS						
COMPANY CONTRACTING THIS WORK (if applicable)				NUMBER OF CONTAINERS SUBMITTED		REMARKS
ANTEA GROUP						
SAMPLE	SAMPLE IDENTIFICATION					
DATE	TIME					
2/10/16	1105	3N-3				
	1110	SN-4				
	1130	SN-5				
	1145	SN-6				
	1045	SN-SNAN-1				
	—	DUP-1				
	—	TRIP BLANK				
	—	—				
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	TIME
Mitchell			John Ham	3/1/16	1715	
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	TIME
Constance	3/1/16	1440	—	—	—	
LABORATORY USE ONLY						LABORATORY REMARKS
RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	CUSTODY SEAL NO.	SAVANNAH LOG NO.	
Constance	3/1/16	10:55	—	—	680-122921 Chain of Custody	

# Certification Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-122921-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Alaska (UST)	State Program	10	UST-104	11-05-16
Arkansas DEQ	State Program	6	88-0692	01-31-17
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-16
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	15-005r	04-16-16 *
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-16
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-16
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA160019	12-31-16
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-16
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	06-30-16
Mississippi	State Program	4	N/A	06-30-16
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	06-30-16
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16 *
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-16
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-16
South Carolina	State Program	4	98001	06-30-16
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-16
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

# TestAmerica

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## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-130081-1

Client Project/Site: Ashland Greensboro Monitoring Wells

For:

ARCADIS U.S., Inc.

801 Corporate Center Drive

Suite 300

Raleigh, North Carolina 27607-5073

Attn: Mr. Chris Kalinowski

Authorized for release by:

9/29/2016 2:25:06 PM

Jerry Lanier, Project Manager I

(912)354-7858 e.3410

[jerry.lanier@testamericainc.com](mailto:jerry.lanier@testamericainc.com)

### LINKS

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Job ID: 680-130081-1**

**Laboratory: TestAmerica Savannah**

Narrative

## CASE NARRATIVE

**Client: ARCADIS U.S., Inc.**

**Project: Ashland Greensboro Monitoring Wells**

**Report Number: 680-130081-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 09/22/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.7° C and 2.6° C.

### VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-3 (680-130081-1), MW-6R (680-130081-2), MW-7S (680-130081-3), MW-7M (680-130081-4), MW-7D (680-130081-5), MW-7BR (680-130081-6), MW-11 (680-130081-7), MW-12 (680-130081-8), MW-12D (680-130081-9), MW-16 (680-130081-10), MW-17D (680-130081-11), MW-19 (680-130081-12), MW-22 (680-130081-13), MW-22BR (680-130081-14), MW-27S (680-130081-15), MW-27D (680-130081-16), MW-29S (680-130081-17), MW-29D (680-130081-18), MW-30 (680-130081-19), EB-1 (680-130081-20), IDW-1 (680-130081-21), DUP-1 (680-130081-22), DUP-2 (680-130081-23) and Trip Blank (680-130081-24) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/26/2016, 09/27/2016 and 09/28/2016.

Chloromethane failed the recovery criteria low for LCS 680-451182/3. Bromoform failed the recovery criteria high for LCSD 680-451182/4. Methylene Chloride exceeded the RPD limit. This is not indicative of a systematic control problem because this was a random marginal exceedance. Qualified results have been reported.

Refer to the QC report for details.

Samples MW-3 (680-130081-1)[250X], MW-6R (680-130081-2)[500X], MW-7M (680-130081-4)[20X], MW-7M (680-130081-4)[50X], MW-7D (680-130081-5)[50X], MW-7BR (680-130081-6)[200X], MW-11 (680-130081-7)[200X], MW-12D (680-130081-9)[50X], MW-16 (680-130081-10)[1000X], MW-17D (680-130081-11)[25X], MW-19 (680-130081-12)[200X], MW-22 (680-130081-13)[10X], MW-22BR (680-130081-14)[10X], MW-22BR (680-130081-14)[2X], MW-27S (680-130081-15)[10X], MW-27D (680-130081-16)[20X], MW-29D (680-130081-18)[5X], IDW-1 (680-130081-21)[100X], DUP-1 (680-130081-22)[50X] and DUP-2 (680-130081-23)[500X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-451349.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### SEMOVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples MW-6R (680-130081-2), MW-7S (680-130081-3), MW-7D (680-130081-5), MW-11 (680-130081-7), MW-12D (680-130081-9) and DUP-1 (680-130081-22) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/23/2016 and analyzed on 09/25/2016 and 09/26/2016.

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample:

## Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

### Job ID: 680-130081-1 (Continued)

#### Laboratory: TestAmerica Savannah (Continued)

(680-130081-B-2-B MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW-6R (680-130081-2). These results have been reported and qualified.

The laboratory control sample (LCS) for preparation batch 680-450827 and analytical batch 680-451016 recovered outside control limits for the following analyte(s): 3,3'-Dichlorobenzidine. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Several analytes failed the recovery criteria low for the MSD of sample MW-6RMSD (680-130081-2) in batch 680-451016. Several analytes exceeded the RPD limit.

Refer to the QC report for details.

Samples MW-6R (680-130081-2)[50X], MW-7D (680-130081-5)[5X], MW-11 (680-130081-7)[20X], MW-12D (680-130081-9)[50X] and DUP-1 (680-130081-22)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-130081-1	MW-3	Water	09/20/16 10:50	09/22/16 09:18
680-130081-2	MW-6R	Water	09/20/16 13:40	09/22/16 09:18
680-130081-3	MW-7S	Water	09/20/16 12:25	09/22/16 09:18
680-130081-4	MW-7M	Water	09/20/16 12:00	09/22/16 09:18
680-130081-5	MW-7D	Water	09/20/16 11:25	09/22/16 09:18
680-130081-6	MW-7BR	Water	09/20/16 15:20	09/22/16 09:18
680-130081-7	MW-11	Water	09/19/16 17:35	09/22/16 09:18
680-130081-8	MW-12	Water	09/20/16 09:20	09/22/16 09:18
680-130081-9	MW-12D	Water	09/20/16 08:45	09/22/16 09:18
680-130081-10	MW-16	Water	09/20/16 13:05	09/22/16 09:18
680-130081-11	MW-17D	Water	09/19/16 08:15	09/22/16 09:18
680-130081-12	MW-19	Water	09/20/16 10:15	09/22/16 09:18
680-130081-13	MW-22	Water	09/20/16 07:40	09/22/16 09:18
680-130081-14	MW-22BR	Water	09/20/16 07:18	09/22/16 09:18
680-130081-15	MW-27S	Water	09/20/16 10:40	09/22/16 09:18
680-130081-16	MW-27D	Water	09/20/16 11:30	09/22/16 09:18
680-130081-17	MW-29S	Water	09/20/16 13:00	09/22/16 09:18
680-130081-18	MW-29D	Water	09/20/16 13:30	09/22/16 09:18
680-130081-19	MW-30	Water	09/20/16 14:20	09/22/16 09:18
680-130081-20	EB-1	Water	09/20/16 13:35	09/22/16 09:18
680-130081-21	IDW-1	Water	09/20/16 15:30	09/22/16 09:18
680-130081-22	DUP-1	Water	09/20/16 00:00	09/22/16 09:18
680-130081-23	DUP-2	Water	09/20/16 00:00	09/22/16 09:18
680-130081-24	Trip Blank	Water	09/20/16 00:00	09/22/16 09:18

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## Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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## Definitions/Glossary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

#### GC/MS Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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# Detection Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-3

## Lab Sample ID: 680-130081-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6700		250		ug/L	250		8260B	Total/NA
1,1-Dichloroethane	390		250		ug/L	250		8260B	Total/NA
1,1-Dichloroethene	1800		250		ug/L	250		8260B	Total/NA
Tetrachloroethene	15000		250		ug/L	250		8260B	Total/NA
Trichloroethene	6100		250		ug/L	250		8260B	Total/NA

## Client Sample ID: MW-6R

## Lab Sample ID: 680-130081-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7400		500		ug/L	500		8260B	Total/NA
1,2-Dichlorobenzene	2300		500		ug/L	500		8260B	Total/NA
Tetrachloroethene	20000		500		ug/L	500		8260B	Total/NA
Toluene	4000		500		ug/L	500		8260B	Total/NA
1,1,1-Trichloroethane	3600		500		ug/L	500		8260B	Total/NA
Trichloroethene	880		500		ug/L	500		8260B	Total/NA
Xylenes, Total	2600		500		ug/L	500		8260B	Total/NA
2-Methylnaphthalene	2.1	F2	0.20		ug/L	1		8270D LL	Total/NA
Acenaphthene	1.4	F2	0.20		ug/L	1		8270D LL	Total/NA
Anthracene	0.31	F1 F2	0.20		ug/L	1		8270D LL	Total/NA
Fluorene	0.69	F2	0.20		ug/L	1		8270D LL	Total/NA
Naphthalene	14	F1	0.20		ug/L	1		8270D LL	Total/NA
Phenanthrene	0.79	F1 F2	0.20		ug/L	1		8270D LL	Total/NA
2-Methylphenol	4.2	F1 F2	2.0		ug/L	1		8270D LL	Total/NA
3 & 4 Methylphenol	4.7	F1 F2	2.0		ug/L	1		8270D LL	Total/NA
Phenol	1.4		0.98		ug/L	1		8270D LL	Total/NA
Di-n-butyl phthalate	8.5	F1 F2	0.98		ug/L	1		8270D LL	Total/NA
1,2,4-Trichlorobenzene - DL	210		49		ug/L	50		8270D LL	Total/NA
1,2-Dichlorobenzene - DL	880		49		ug/L	50		8270D LL	Total/NA
1,4-Dichlorobenzene - DL	98		49		ug/L	50		8270D LL	Total/NA

## Client Sample ID: MW-7S

## Lab Sample ID: 680-130081-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.7		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: MW-7M

## Lab Sample ID: 680-130081-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	93		20		ug/L	20		8260B	Total/NA
cis-1,2-Dichloroethene	580		20		ug/L	20		8260B	Total/NA
1,2-Dichlorobenzene	190		20		ug/L	20		8260B	Total/NA
1,4-Dichlorobenzene	20		20		ug/L	20		8260B	Total/NA
1,1-Dichloroethane	440		20		ug/L	20		8260B	Total/NA
1,1-Dichloroethene	1100		20		ug/L	20		8260B	Total/NA
1,1,1-Trichloroethane	420		20		ug/L	20		8260B	Total/NA
Trichloroethene	540		20		ug/L	20		8260B	Total/NA
Xylenes, Total	490		20		ug/L	20		8260B	Total/NA
Tetrachloroethene - DL	5500		50		ug/L	50		8260B	Total/NA

## Client Sample ID: MW-7D

## Lab Sample ID: 680-130081-5

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Detection Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-7D (Continued)

## Lab Sample ID: 680-130081-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	170		50		ug/L	50		8260B	Total/NA
1,2-Dichlorobenzene	60		50		ug/L	50		8260B	Total/NA
1,1-Dichloroethane	76		50		ug/L	50		8260B	Total/NA
1,1-Dichloroethene	330		50		ug/L	50		8260B	Total/NA
Tetrachloroethene	3000		50		ug/L	50		8260B	Total/NA
Trichloroethene	400		50		ug/L	50		8260B	Total/NA
Xylenes, Total	73		50		ug/L	50		8260B	Total/NA
2-Methylnaphthalene	2.8		0.19		ug/L	1		8270D LL	Total/NA
Naphthalene	6.9		0.19		ug/L	1		8270D LL	Total/NA
1,3-Dichlorobenzene	1.1		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dichlorobenzene	4.4		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dioxane	15		1.9		ug/L	1		8270D LL	Total/NA
1,2,4-Trichlorobenzene - DL	34		4.8		ug/L	5		8270D LL	Total/NA
1,2-Dichlorobenzene - DL	47		4.8		ug/L	5		8270D LL	Total/NA

## Client Sample ID: MW-7BR

## Lab Sample ID: 680-130081-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	9700		200		ug/L	200		8260B	Total/NA
1,2-Dichlorobenzene	1700		200		ug/L	200		8260B	Total/NA
1,1-Dichloroethane	1200		200		ug/L	200		8260B	Total/NA
1,1-Dichloroethene	920		200		ug/L	200		8260B	Total/NA
Ethylbenzene	1300		200		ug/L	200		8260B	Total/NA
Tetrachloroethene	640		200		ug/L	200		8260B	Total/NA
Toluene	7200		200		ug/L	200		8260B	Total/NA
Trichloroethene	850		200		ug/L	200		8260B	Total/NA
Vinyl chloride	2400		200		ug/L	200		8260B	Total/NA
Xylenes, Total	4800		200		ug/L	200		8260B	Total/NA

## Client Sample ID: MW-11

## Lab Sample ID: 680-130081-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7400		200		ug/L	200		8260B	Total/NA
1,1-Dichloroethene	2200		200		ug/L	200		8260B	Total/NA
Tetrachloroethene	5700		200		ug/L	200		8260B	Total/NA
Trichloroethene	12000		200		ug/L	200		8260B	Total/NA
1,2,4-Trichlorobenzene	1.6		0.96		ug/L	1		8270D LL	Total/NA
1,2-Dichlorobenzene	2.6		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dichlorobenzene	3.1		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dioxane - DL	280		38		ug/L	20		8270D LL	Total/NA

## Client Sample ID: MW-12

## Lab Sample ID: 680-130081-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.3		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	21		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: MW-12D

## Lab Sample ID: 680-130081-9

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Detection Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-12D (Continued)

## Lab Sample ID: 680-130081-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	350		50		ug/L	50		8260B	Total/NA
1,1-Dichloroethene	280		50		ug/L	50		8260B	Total/NA
Tetrachloroethene	880		50		ug/L	50		8260B	Total/NA
Trichloroethene	5100		50		ug/L	50		8260B	Total/NA
1,2-Dichlorobenzene	1.5		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dioxane - DL	530		96		ug/L	50		8270D LL	Total/NA

## Client Sample ID: MW-16

## Lab Sample ID: 680-130081-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	53000		1000		ug/L	1000		8260B	Total/NA

## Client Sample ID: MW-17D

## Lab Sample ID: 680-130081-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	270		25		ug/L	25		8260B	Total/NA
1,1-Dichloroethene	100		25		ug/L	25		8260B	Total/NA
Tetrachloroethene	3000		25		ug/L	25		8260B	Total/NA
Trichloroethene	1400		25		ug/L	25		8260B	Total/NA

## Client Sample ID: MW-19

## Lab Sample ID: 680-130081-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	220		200		ug/L	200		8260B	Total/NA
cis-1,2-Dichloroethene	2300		200		ug/L	200		8260B	Total/NA
1,1-Dichloroethene	780		200		ug/L	200		8260B	Total/NA
Tetrachloroethene	20000		200		ug/L	200		8260B	Total/NA
Trichloroethene	4500		200		ug/L	200		8260B	Total/NA

## Client Sample ID: MW-22

## Lab Sample ID: 680-130081-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	490		10		ug/L	10		8260B	Total/NA
1,1-Dichloroethane	13		10		ug/L	10		8260B	Total/NA
1,1-Dichloroethene	200		10		ug/L	10		8260B	Total/NA
Tetrachloroethene	1200		10		ug/L	10		8260B	Total/NA
Trichloroethene	560		10		ug/L	10		8260B	Total/NA

## Client Sample ID: MW-22BR

## Lab Sample ID: 680-130081-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	28		20		ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	57		2.0		ug/L	2		8260B	Total/NA
1,1-Dichloroethane	9.4		2.0		ug/L	2		8260B	Total/NA
1,1-Dichloroethene	130		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	260		2.0		ug/L	2		8260B	Total/NA
Tetrachloroethene - DL	370		10		ug/L	10		8260B	Total/NA

## Client Sample ID: MW-27S

## Lab Sample ID: 680-130081-15

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Detection Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-27S (Continued)

## Lab Sample ID: 680-130081-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	71		10		ug/L	10		8260B	Total/NA
1,1-Dichloroethene	76		10		ug/L	10		8260B	Total/NA
Tetrachloroethene	1100		10		ug/L	10		8260B	Total/NA
Trichloroethene	540		10		ug/L	10		8260B	Total/NA

## Client Sample ID: MW-27D

## Lab Sample ID: 680-130081-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	250		20		ug/L	20		8260B	Total/NA
1,1-Dichloroethene	130		20		ug/L	20		8260B	Total/NA
Tetrachloroethene	1200		20		ug/L	20		8260B	Total/NA
Trichloroethene	860		20		ug/L	20		8260B	Total/NA

## Client Sample ID: MW-29S

## Lab Sample ID: 680-130081-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	17		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethane	1.8		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	8.1		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	80		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	32		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: MW-29D

## Lab Sample ID: 680-130081-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	81		5.0		ug/L	5		8260B	Total/NA
1,1-Dichloroethane	8.0		5.0		ug/L	5		8260B	Total/NA
1,1-Dichloroethene	39		5.0		ug/L	5		8260B	Total/NA
Tetrachloroethene	390		5.0		ug/L	5		8260B	Total/NA
Trichloroethene	160		5.0		ug/L	5		8260B	Total/NA

## Client Sample ID: MW-30

## Lab Sample ID: 680-130081-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	11		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	5.3		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: EB-1

## Lab Sample ID: 680-130081-20

No Detections.

## Client Sample ID: IDW-1

## Lab Sample ID: 680-130081-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1700		100		ug/L	100		8260B	Total/NA
1,2-Dichlorobenzene	300		100		ug/L	100		8260B	Total/NA
1,1-Dichloroethane	250		100		ug/L	100		8260B	Total/NA
1,1-Dichloroethene	240		100		ug/L	100		8260B	Total/NA
Ethylbenzene	210		100		ug/L	100		8260B	Total/NA
Tetrachloroethene	1000		100		ug/L	100		8260B	Total/NA
Toluene	1100		100		ug/L	100		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

## Detection Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

### Client Sample ID: IDW-1 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	170		100		ug/L	100		8260B	Total/NA
Trichloroethene	400		100		ug/L	100		8260B	Total/NA
Vinyl chloride	400		100		ug/L	100		8260B	Total/NA
Xylenes, Total	740		100		ug/L	100		8260B	Total/NA

### Client Sample ID: DUP-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	340		50		ug/L	50		8260B	Total/NA
1,1-Dichloroethene	250		50		ug/L	50		8260B	Total/NA
Tetrachloroethene	850		50		ug/L	50		8260B	Total/NA
Trichloroethene	4500		50		ug/L	50		8260B	Total/NA
1,2-Dichlorobenzene	1.2		0.96		ug/L	1		8270D LL	Total/NA
1,4-Dioxane - DL	470		96		ug/L	50		8270D LL	Total/NA

### Client Sample ID: DUP-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	51000		500		ug/L	500		8260B	Total/NA

### Client Sample ID: Trip Blank

No Detections.								Lab Sample ID: 680-130081-24
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This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-3**

Date Collected: 09/20/16 10:50

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<2500		2500		ug/L			09/26/16 12:53	250
Benzene	<250		250		ug/L			09/26/16 12:53	250
Bromoform	<250		250		ug/L			09/26/16 12:53	250
Bromomethane	<1300		1300		ug/L			09/26/16 12:53	250
2-Butanone (MEK)	<2500		2500		ug/L			09/26/16 12:53	250
Carbon disulfide	<500		500		ug/L			09/26/16 12:53	250
Carbon tetrachloride	<250		250		ug/L			09/26/16 12:53	250
Chlorobenzene	<250		250		ug/L			09/26/16 12:53	250
Chlorodibromomethane	<250		250		ug/L			09/26/16 12:53	250
Chloroethane	<1300		1300		ug/L			09/26/16 12:53	250
Chloroform	<250		250		ug/L			09/26/16 12:53	250
Chloromethane	<250		250		ug/L			09/26/16 12:53	250
<b>cis-1,2-Dichloroethene</b>	<b>6700</b>		250		ug/L			09/26/16 12:53	250
cis-1,3-Dichloropropene	<250		250		ug/L			09/26/16 12:53	250
1,2-Dichlorobenzene	<250		250		ug/L			09/26/16 12:53	250
1,4-Dichlorobenzene	<250		250		ug/L			09/26/16 12:53	250
Dichlorobromomethane	<250		250		ug/L			09/26/16 12:53	250
<b>1,1-Dichloroethane</b>	<b>390</b>		250		ug/L			09/26/16 12:53	250
1,2-Dichloroethane	<250		250		ug/L			09/26/16 12:53	250
<b>1,1-Dichloroethene</b>	<b>1800</b>		250		ug/L			09/26/16 12:53	250
1,2-Dichloropropane	<250		250		ug/L			09/26/16 12:53	250
Ethylbenzene	<250		250		ug/L			09/26/16 12:53	250
2-Hexanone	<2500		2500		ug/L			09/26/16 12:53	250
Methylene Chloride	<1300		1300		ug/L			09/26/16 12:53	250
4-Methyl-2-pentanone (MIBK)	<2500		2500		ug/L			09/26/16 12:53	250
Styrene	<250		250		ug/L			09/26/16 12:53	250
1,1,2,2-Tetrachloroethane	<250		250		ug/L			09/26/16 12:53	250
<b>Tetrachloroethene</b>	<b>15000</b>		250		ug/L			09/26/16 12:53	250
Toluene	<250		250		ug/L			09/26/16 12:53	250
trans-1,2-Dichloroethene	<250		250		ug/L			09/26/16 12:53	250
trans-1,3-Dichloropropene	<250		250		ug/L			09/26/16 12:53	250
1,1,1-Trichloroethane	<250		250		ug/L			09/26/16 12:53	250
1,1,2-Trichloroethane	<250		250		ug/L			09/26/16 12:53	250
<b>Trichloroethene</b>	<b>6100</b>		250		ug/L			09/26/16 12:53	250
Vinyl chloride	<250		250		ug/L			09/26/16 12:53	250
Xylenes, Total	<250		250		ug/L			09/26/16 12:53	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120			250
1,2-Dichloroethane-d4 (Surr)	100		73 - 131			250
Dibromofluoromethane (Surr)	97		80 - 122			250
4-Bromofluorobenzene (Surr)	106		80 - 120			250

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-6R**

**Date Collected: 09/20/16 13:40**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-2**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<5000		5000		ug/L			09/26/16 13:13	500
Benzene	<500		500		ug/L			09/26/16 13:13	500
Bromoform	<500		500		ug/L			09/26/16 13:13	500
Bromomethane	<2500		2500		ug/L			09/26/16 13:13	500
2-Butanone (MEK)	<5000		5000		ug/L			09/26/16 13:13	500
Carbon disulfide	<1000		1000		ug/L			09/26/16 13:13	500
Carbon tetrachloride	<500		500		ug/L			09/26/16 13:13	500
Chlorobenzene	<500		500		ug/L			09/26/16 13:13	500
Chlorodibromomethane	<500		500		ug/L			09/26/16 13:13	500
Chloroethane	<2500		2500		ug/L			09/26/16 13:13	500
Chloroform	<500		500		ug/L			09/26/16 13:13	500
Chloromethane	<500		500		ug/L			09/26/16 13:13	500
<b>cis-1,2-Dichloroethene</b>	<b>7400</b>		500		ug/L			09/26/16 13:13	500
cis-1,3-Dichloropropene	<500		500		ug/L			09/26/16 13:13	500
<b>1,2-Dichlorobenzene</b>	<b>2300</b>		500		ug/L			09/26/16 13:13	500
1,4-Dichlorobenzene	<500		500		ug/L			09/26/16 13:13	500
Dichlorobromomethane	<500		500		ug/L			09/26/16 13:13	500
1,1-Dichloroethane	<500		500		ug/L			09/26/16 13:13	500
1,2-Dichloroethane	<500		500		ug/L			09/26/16 13:13	500
1,1-Dichloroethene	<500		500		ug/L			09/26/16 13:13	500
1,2-Dichloropropane	<500		500		ug/L			09/26/16 13:13	500
Ethylbenzene	<500		500		ug/L			09/26/16 13:13	500
2-Hexanone	<5000		5000		ug/L			09/26/16 13:13	500
Methylene Chloride	<2500		2500		ug/L			09/26/16 13:13	500
4-Methyl-2-pentanone (MIBK)	<5000		5000		ug/L			09/26/16 13:13	500
Styrene	<500		500		ug/L			09/26/16 13:13	500
1,1,2,2-Tetrachloroethane	<500		500		ug/L			09/26/16 13:13	500
<b>Tetrachloroethene</b>	<b>20000</b>		500		ug/L			09/26/16 13:13	500
<b>Toluene</b>	<b>4000</b>		500		ug/L			09/26/16 13:13	500
trans-1,2-Dichloroethene	<500		500		ug/L			09/26/16 13:13	500
trans-1,3-Dichloropropene	<500		500		ug/L			09/26/16 13:13	500
<b>1,1,1-Trichloroethane</b>	<b>3600</b>		500		ug/L			09/26/16 13:13	500
1,1,2-Trichloroethane	<500		500		ug/L			09/26/16 13:13	500
<b>Trichloroethene</b>	<b>880</b>		500		ug/L			09/26/16 13:13	500
Vinyl chloride	<500		500		ug/L			09/26/16 13:13	500
<b>Xylenes, Total</b>	<b>2600</b>		500		ug/L			09/26/16 13:13	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120			500
1,2-Dichloroethane-d4 (Surr)	100		73 - 131			500
Dibromofluoromethane (Surr)	96		80 - 122			500
4-Bromofluorobenzene (Surr)	106		80 - 120			500

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-6R**

**Date Collected: 09/20/16 13:40**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-2**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	2.1	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Acenaphthene	1.4	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Acenaphthylene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Anthracene	0.31	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Benzo[a]anthracene	<0.20	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Benzo[a]pyrene	<0.20	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Benzo[b]fluoranthene	<0.20	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Benzo[g,h,i]perylene	<0.20	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Benzo[k]fluoranthene	<0.20	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Chrysene	<0.20	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Dibenz(a,h)anthracene	<0.20	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Fluorene	0.69	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Fluoranthene	<0.20	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Indeno[1,2,3-cd]pyrene	<0.20	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Naphthalene	14	F1	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Phenanthrene	0.79	F1 F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Pyrene	<0.20	F2	0.20		ug/L	09/23/16 13:09	09/25/16 18:59		1
Bis(2-ethylhexyl) phthalate	<4.9		4.9		ug/L	09/23/16 13:09	09/25/16 18:59		1
1,4-Dioxane	<2.0	F2	2.0		ug/L	09/23/16 13:09	09/25/16 18:59		1
bis(chloroisopropyl) ether	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4,5-Trichlorophenol	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4,6-Trichlorophenol	<0.98	F1 F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4-Dichlorophenol	<0.98	F1 F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4-Dimethylphenol	<2.0	F2	2.0		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4-Dinitrophenol	<9.8		9.8		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,4-Dinitrotoluene	<0.98	F1 F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2,6-Dinitrotoluene	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2-Chloronaphthalene	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2-Chlorophenol	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
<b>2-Methylphenol</b>	<b>4.2</b>	<b>F1 F2</b>	<b>2.0</b>		<b>ug/L</b>	<b>09/23/16 13:09</b>	<b>09/25/16 18:59</b>		<b>1</b>
2-Nitroaniline	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
2-Nitrophenol	<0.98	F1 F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
<b>3 &amp; 4 Methylphenol</b>	<b>4.7</b>	<b>F1 F2</b>	<b>2.0</b>		<b>ug/L</b>	<b>09/23/16 13:09</b>	<b>09/25/16 18:59</b>		<b>1</b>
3,3'-Dichlorobenzidine	<20	* F1	20		ug/L	09/23/16 13:09	09/25/16 18:59		1
3-Nitroaniline	<4.9	F1 F2	4.9		ug/L	09/23/16 13:09	09/25/16 18:59		1
4,6-Dinitro-2-methylphenol	<4.9	F2	4.9		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Bromophenyl phenyl ether	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Chloro-3-methylphenol	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Chloroaniline	<3.9		3.9		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Chlorophenyl phenyl ether	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Nitroaniline	<4.9	F1	4.9		ug/L	09/23/16 13:09	09/25/16 18:59		1
4-Nitrophenol	<7.8	F2	7.8		ug/L	09/23/16 13:09	09/25/16 18:59		1
Bis(2-chloroethoxy)methane	<0.98		0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
Bis(2-chloroethyl)ether	<0.98		0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
Butyl benzyl phthalate	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
Carbazole	<2.0		2.0		ug/L	09/23/16 13:09	09/25/16 18:59		1
Dibenzofuran	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
Diethyl phthalate	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1
Dimethyl phthalate	<0.98	F2	0.98		ug/L	09/23/16 13:09	09/25/16 18:59		1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-6R**

**Date Collected: 09/20/16 13:40**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-2**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	<0.98	F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Hexachlorobutadiene	<0.98		0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Hexachlorocyclopentadiene	<2.0	F1	2.0		ug/L		09/23/16 13:09	09/25/16 18:59	1
Hexachloroethane	<0.98	F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Isophorone	<0.98	F1 F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Nitrobenzene	<0.98	F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Pentachlorophenol	<4.9	F2	4.9		ug/L		09/23/16 13:09	09/25/16 18:59	1
<b>Phenol</b>	<b>1.4</b>		0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Di-n-octyl phthalate	<0.98	F1 F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
N-Nitrosodi-n-propylamine	<0.98	F2	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
N-Nitrosodiphenylamine	<0.98		0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
<b>Di-n-butyl phthalate</b>	<b>8.5</b>	<b>F1 F2</b>	0.98		ug/L		09/23/16 13:09	09/25/16 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	42		20 - 113				09/23/16 13:09	09/25/16 18:59	1
Nitrobenzene-d5	41		37 - 103				09/23/16 13:09	09/25/16 18:59	1
Terphenyl-d14	39		22 - 121				09/23/16 13:09	09/25/16 18:59	1
2,4,6-Tribromophenol	46		39 - 133				09/23/16 13:09	09/25/16 18:59	1
2-Fluorophenol	14	X	18 - 112				09/23/16 13:09	09/25/16 18:59	1
2-Fluorobiphenyl	38		31 - 107				09/23/16 13:09	09/25/16 18:59	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-6R**

Date Collected: 09/20/16 13:40

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-2**

Matrix: Water

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	210		49		ug/L		09/23/16 13:09	09/26/16 17:54	50
1,2-Dichlorobenzene	880		49		ug/L		09/23/16 13:09	09/26/16 17:54	50
1,3-Dichlorobenzene	<49		49		ug/L		09/23/16 13:09	09/26/16 17:54	50
1,4-Dichlorobenzene	98		49		ug/L		09/23/16 13:09	09/26/16 17:54	50

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TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7S**

Date Collected: 09/20/16 12:25

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-3**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/26/16 13:34	1
Benzene	<1.0		1.0		ug/L			09/26/16 13:34	1
Bromoform	<1.0		1.0		ug/L			09/26/16 13:34	1
Bromomethane	<5.0		5.0		ug/L			09/26/16 13:34	1
2-Butanone (MEK)	<10		10		ug/L			09/26/16 13:34	1
Carbon disulfide	<2.0		2.0		ug/L			09/26/16 13:34	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/26/16 13:34	1
Chlorobenzene	<1.0		1.0		ug/L			09/26/16 13:34	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/26/16 13:34	1
Chloroethane	<5.0		5.0		ug/L			09/26/16 13:34	1
Chloroform	<1.0		1.0		ug/L			09/26/16 13:34	1
Chloromethane	<1.0		1.0		ug/L			09/26/16 13:34	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/26/16 13:34	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/26/16 13:34	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/26/16 13:34	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/26/16 13:34	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/26/16 13:34	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/26/16 13:34	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/26/16 13:34	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/26/16 13:34	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/26/16 13:34	1
Ethylbenzene	<1.0		1.0		ug/L			09/26/16 13:34	1
2-Hexanone	<10		10		ug/L			09/26/16 13:34	1
Methylene Chloride	<5.0		5.0		ug/L			09/26/16 13:34	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/26/16 13:34	1
Styrene	<1.0		1.0		ug/L			09/26/16 13:34	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/26/16 13:34	1
<b>Tetrachloroethene</b>	<b>1.7</b>		1.0		ug/L			09/26/16 13:34	1
Toluene	<1.0		1.0		ug/L			09/26/16 13:34	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/26/16 13:34	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/26/16 13:34	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/26/16 13:34	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/26/16 13:34	1
Trichloroethene	<1.0		1.0		ug/L			09/26/16 13:34	1
Vinyl chloride	<1.0		1.0		ug/L			09/26/16 13:34	1
Xylenes, Total	<1.0		1.0		ug/L			09/26/16 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		09/26/16 13:34	1
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		09/26/16 13:34	1
Dibromofluoromethane (Surr)	95		80 - 122		09/26/16 13:34	1
4-Bromofluorobenzene (Surr)	106		80 - 120		09/26/16 13:34	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7S**

**Date Collected: 09/20/16 12:25**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-3**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Acenaphthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Acenaphthylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Benzo[a]anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Benzo[a]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Benzo[b]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Benzo[k]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Chrysene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Fluorene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Naphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Phenanthrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:21		1
Bis(2-ethylhexyl) phthalate	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:21		1
1,2,4-Trichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
1,2-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
1,3-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
1,4-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
1,4-Dioxane	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:21		1
bis(chloroisopropyl) ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4,5-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4-Dichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4-Dimethylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4-Dinitrophenol	<9.6		9.6		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,4-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2,6-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2-Chloronaphthalene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2-Chlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2-Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:21		1
2-Nitroaniline	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
2-Nitrophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
3 & 4 Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:21		1
3,3'-Dichlorobenzidine	<19 *		19		ug/L	09/23/16 13:09	09/25/16 19:21		1
3-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:21		1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Bromophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Chloroaniline	<3.8		3.8		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Chlorophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:21		1
4-Nitrophenol	<7.7		7.7		ug/L	09/23/16 13:09	09/25/16 19:21		1
Bis(2-chloroethoxy)methane	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
Bis(2-chloroethyl)ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1
Butyl benzyl phthalate	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:21		1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7S**

**Date Collected: 09/20/16 12:25**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-3**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 19:21	1
Dibenzofuran	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Diethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Dimethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Hexachlorobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Hexachlorobutadiene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Hexachlorocyclopentadiene	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 19:21	1
Hexachloroethane	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Isophorone	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Nitrobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Pentachlorophenol	<4.8		4.8		ug/L		09/23/16 13:09	09/25/16 19:21	1
Phenol	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Di-n-octyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
N-Nitrosodi-n-propylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
N-Nitrosodiphenylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	68		20 - 113				09/23/16 13:09	09/25/16 19:21	1
Nitrobenzene-d5	82		37 - 103				09/23/16 13:09	09/25/16 19:21	1
Terphenyl-d14	83		22 - 121				09/23/16 13:09	09/25/16 19:21	1
2,4,6-Tribromophenol	85		39 - 133				09/23/16 13:09	09/25/16 19:21	1
2-Fluorophenol	70		18 - 112				09/23/16 13:09	09/25/16 19:21	1
2-Fluorobiphenyl	80		31 - 107				09/23/16 13:09	09/25/16 19:21	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7M**

**Date Collected: 09/20/16 12:00**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-4**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<200		200		ug/L			09/26/16 13:54	20
Benzene	<20		20		ug/L			09/26/16 13:54	20
Bromoform	<20		20		ug/L			09/26/16 13:54	20
Bromomethane	<100		100		ug/L			09/26/16 13:54	20
2-Butanone (MEK)	<200		200		ug/L			09/26/16 13:54	20
Carbon disulfide	<40		40		ug/L			09/26/16 13:54	20
Carbon tetrachloride	<20		20		ug/L			09/26/16 13:54	20
Chlorobenzene	<20		20		ug/L			09/26/16 13:54	20
Chlorodibromomethane	<20		20		ug/L			09/26/16 13:54	20
Chloroethane	<100		100		ug/L			09/26/16 13:54	20
<b>Chloroform</b>	<b>93</b>		20		ug/L			09/26/16 13:54	20
Chloromethane	<20		20		ug/L			09/26/16 13:54	20
<b>cis-1,2-Dichloroethene</b>	<b>580</b>		20		ug/L			09/26/16 13:54	20
cis-1,3-Dichloropropene	<20		20		ug/L			09/26/16 13:54	20
<b>1,2-Dichlorobenzene</b>	<b>190</b>		20		ug/L			09/26/16 13:54	20
<b>1,4-Dichlorobenzene</b>	<b>20</b>		20		ug/L			09/26/16 13:54	20
Dichlorobromomethane	<20		20		ug/L			09/26/16 13:54	20
<b>1,1-Dichloroethane</b>	<b>440</b>		20		ug/L			09/26/16 13:54	20
1,2-Dichloroethane	<20		20		ug/L			09/26/16 13:54	20
<b>1,1-Dichloroethene</b>	<b>1100</b>		20		ug/L			09/26/16 13:54	20
1,2-Dichloropropane	<20		20		ug/L			09/26/16 13:54	20
Ethylbenzene	<20		20		ug/L			09/26/16 13:54	20
2-Hexanone	<200		200		ug/L			09/26/16 13:54	20
Methylene Chloride	<100		100		ug/L			09/26/16 13:54	20
4-Methyl-2-pentanone (MIBK)	<200		200		ug/L			09/26/16 13:54	20
Styrene	<20		20		ug/L			09/26/16 13:54	20
1,1,2,2-Tetrachloroethane	<20		20		ug/L			09/26/16 13:54	20
Toluene	<20		20		ug/L			09/26/16 13:54	20
trans-1,2-Dichloroethene	<20		20		ug/L			09/26/16 13:54	20
trans-1,3-Dichloropropene	<20		20		ug/L			09/26/16 13:54	20
<b>1,1,1-Trichloroethane</b>	<b>420</b>		20		ug/L			09/26/16 13:54	20
1,1,2-Trichloroethane	<20		20		ug/L			09/26/16 13:54	20
<b>Trichloroethene</b>	<b>540</b>		20		ug/L			09/26/16 13:54	20
Vinyl chloride	<20		20		ug/L			09/26/16 13:54	20
<b>Xylenes, Total</b>	<b>490</b>		20		ug/L			09/26/16 13:54	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Toluene-d8 (Surr)	99		80 - 120					09/26/16 13:54	20
1,2-Dichloroethane-d4 (Surr)	106		73 - 131					09/26/16 13:54	20
Dibromofluoromethane (Surr)	101		80 - 122					09/26/16 13:54	20
4-Bromofluorobenzene (Surr)	104		80 - 120					09/26/16 13:54	20

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7M**

Date Collected: 09/20/16 12:00

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-4**

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	5500		50		ug/L			09/28/16 12:46	50
<hr/>									
<b>Surrogate</b>									
Toluene-d8 (Surr)	96		80 - 120				Prepared	09/28/16 12:46	50
1,2-Dichloroethane-d4 (Surr)	112		73 - 131					09/28/16 12:46	50
Dibromofluoromethane (Surr)	103		80 - 122					09/28/16 12:46	50
4-Bromofluorobenzene (Surr)	103		80 - 120					09/28/16 12:46	50

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7D**

**Date Collected: 09/20/16 11:25**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-5**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<500		500		ug/L			09/26/16 14:14	50
Benzene	<50		50		ug/L			09/26/16 14:14	50
Bromoform	<50		50		ug/L			09/26/16 14:14	50
Bromomethane	<250		250		ug/L			09/26/16 14:14	50
2-Butanone (MEK)	<500		500		ug/L			09/26/16 14:14	50
Carbon disulfide	<100		100		ug/L			09/26/16 14:14	50
Carbon tetrachloride	<50		50		ug/L			09/26/16 14:14	50
Chlorobenzene	<50		50		ug/L			09/26/16 14:14	50
Chlorodibromomethane	<50		50		ug/L			09/26/16 14:14	50
Chloroethane	<250		250		ug/L			09/26/16 14:14	50
Chloroform	<50		50		ug/L			09/26/16 14:14	50
Chloromethane	<50		50		ug/L			09/26/16 14:14	50
<b>cis-1,2-Dichloroethene</b>	<b>170</b>		50		ug/L			09/26/16 14:14	50
cis-1,3-Dichloropropene	<50		50		ug/L			09/26/16 14:14	50
<b>1,2-Dichlorobenzene</b>	<b>60</b>		50		ug/L			09/26/16 14:14	50
1,4-Dichlorobenzene	<50		50		ug/L			09/26/16 14:14	50
Dichlorobromomethane	<50		50		ug/L			09/26/16 14:14	50
<b>1,1-Dichloroethane</b>	<b>76</b>		50		ug/L			09/26/16 14:14	50
1,2-Dichloroethane	<50		50		ug/L			09/26/16 14:14	50
<b>1,1-Dichloroethene</b>	<b>330</b>		50		ug/L			09/26/16 14:14	50
1,2-Dichloropropane	<50		50		ug/L			09/26/16 14:14	50
Ethylbenzene	<50		50		ug/L			09/26/16 14:14	50
2-Hexanone	<500		500		ug/L			09/26/16 14:14	50
Methylene Chloride	<250		250		ug/L			09/26/16 14:14	50
4-Methyl-2-pentanone (MIBK)	<500		500		ug/L			09/26/16 14:14	50
Styrene	<50		50		ug/L			09/26/16 14:14	50
1,1,2,2-Tetrachloroethane	<50		50		ug/L			09/26/16 14:14	50
<b>Tetrachloroethene</b>	<b>3000</b>		50		ug/L			09/26/16 14:14	50
Toluene	<50		50		ug/L			09/26/16 14:14	50
trans-1,2-Dichloroethene	<50		50		ug/L			09/26/16 14:14	50
trans-1,3-Dichloropropene	<50		50		ug/L			09/26/16 14:14	50
1,1,1-Trichloroethane	<50		50		ug/L			09/26/16 14:14	50
1,1,2-Trichloroethane	<50		50		ug/L			09/26/16 14:14	50
<b>Trichloroethene</b>	<b>400</b>		50		ug/L			09/26/16 14:14	50
Vinyl chloride	<50		50		ug/L			09/26/16 14:14	50
<b>Xylenes, Total</b>	<b>73</b>		50		ug/L			09/26/16 14:14	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	102		80 - 120				09/26/16 14:14	50	
1,2-Dichloroethane-d4 (Surr)	99		73 - 131				09/26/16 14:14	50	
Dibromofluoromethane (Surr)	96		80 - 122				09/26/16 14:14	50	
4-Bromofluorobenzene (Surr)	105		80 - 120				09/26/16 14:14	50	

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7D**

**Date Collected: 09/20/16 11:25**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-5**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>2-Methylnaphthalene</b>	<b>2.8</b>		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Acenaphthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Acenaphthylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Benzo[a]anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Benzo[a]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Benzo[b]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Benzo[k]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Chrysene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Fluorene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
<b>Naphthalene</b>	<b>6.9</b>		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Phenanthrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 19:44		1
Bis(2-ethylhexyl) phthalate	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:44		1
<b>1,3-Dichlorobenzene</b>	<b>1.1</b>		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
<b>1,4-Dichlorobenzene</b>	<b>4.4</b>		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
<b>1,4-Dioxane</b>	<b>15</b>		1.9		ug/L	09/23/16 13:09	09/25/16 19:44		1
bis(chloroisopropyl) ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4,5-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4-Dichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4-Dimethylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4-Dinitrophenol	<9.6		9.6		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,4-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2,6-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2-Chloronaphthalene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2-Chlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2-Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:44		1
2-Nitroaniline	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
2-Nitrophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
3 & 4 Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:44		1
3,3'-Dichlorobenzidine	<19 *		19		ug/L	09/23/16 13:09	09/25/16 19:44		1
3-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:44		1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Bromophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Chloroaniline	<3.8		3.8		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Chlorophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 19:44		1
4-Nitrophenol	<7.7		7.7		ug/L	09/23/16 13:09	09/25/16 19:44		1
Bis(2-chloroethoxy)methane	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
Bis(2-chloroethyl)ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
Butyl benzyl phthalate	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1
Carbazole	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 19:44		1
Dibenzofuran	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 19:44		1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7D**

**Date Collected: 09/20/16 11:25**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-5**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Dimethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Hexachlorobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Hexachlorobutadiene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Hexachlorocyclopentadiene	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 19:44	1
Hexachloroethane	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Isophorone	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Nitrobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Pentachlorophenol	<4.8		4.8		ug/L		09/23/16 13:09	09/25/16 19:44	1
Phenol	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Di-n-octyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
N-Nitrosodi-n-propylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
N-Nitrosodiphenylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 19:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	67		20 - 113				09/23/16 13:09	09/25/16 19:44	1
Nitrobenzene-d5	73		37 - 103				09/23/16 13:09	09/25/16 19:44	1
Terphenyl-d14	64		22 - 121				09/23/16 13:09	09/25/16 19:44	1
2,4,6-Tribromophenol	80		39 - 133				09/23/16 13:09	09/25/16 19:44	1
2-Fluorophenol	69		18 - 112				09/23/16 13:09	09/25/16 19:44	1
2-Fluorobiphenyl	71		31 - 107				09/23/16 13:09	09/25/16 19:44	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

**Client Sample ID: MW-7D**

**Lab Sample ID: 680-130081-5**

Date Collected: 09/20/16 11:25

Matrix: Water

Date Received: 09/22/16 09:18

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	34		4.8		ug/L		09/23/16 13:09	09/26/16 18:18	5
1,2-Dichlorobenzene	47		4.8		ug/L		09/23/16 13:09	09/26/16 18:18	5

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-7BR**

Date Collected: 09/20/16 15:20

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-6**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<2000		2000		ug/L			09/26/16 14:35	200
Benzene	<200		200		ug/L			09/26/16 14:35	200
Bromoform	<200		200		ug/L			09/26/16 14:35	200
Bromomethane	<1000		1000		ug/L			09/26/16 14:35	200
2-Butanone (MEK)	<2000		2000		ug/L			09/26/16 14:35	200
Carbon disulfide	<400		400		ug/L			09/26/16 14:35	200
Carbon tetrachloride	<200		200		ug/L			09/26/16 14:35	200
Chlorobenzene	<200		200		ug/L			09/26/16 14:35	200
Chlorodibromomethane	<200		200		ug/L			09/26/16 14:35	200
Chloroethane	<1000		1000		ug/L			09/26/16 14:35	200
Chloroform	<200		200		ug/L			09/26/16 14:35	200
Chloromethane	<200		200		ug/L			09/26/16 14:35	200
<b>cis-1,2-Dichloroethene</b>	<b>9700</b>		200		ug/L			09/26/16 14:35	200
cis-1,3-Dichloropropene	<200		200		ug/L			09/26/16 14:35	200
<b>1,2-Dichlorobenzene</b>	<b>1700</b>		200		ug/L			09/26/16 14:35	200
1,4-Dichlorobenzene	<200		200		ug/L			09/26/16 14:35	200
Dichlorobromomethane	<200		200		ug/L			09/26/16 14:35	200
<b>1,1-Dichloroethane</b>	<b>1200</b>		200		ug/L			09/26/16 14:35	200
1,2-Dichloroethane	<200		200		ug/L			09/26/16 14:35	200
<b>1,1-Dichloroethene</b>	<b>920</b>		200		ug/L			09/26/16 14:35	200
1,2-Dichloropropane	<200		200		ug/L			09/26/16 14:35	200
<b>Ethylbenzene</b>	<b>1300</b>		200		ug/L			09/26/16 14:35	200
2-Hexanone	<2000		2000		ug/L			09/26/16 14:35	200
Methylene Chloride	<1000		1000		ug/L			09/26/16 14:35	200
4-Methyl-2-pentanone (MIBK)	<2000		2000		ug/L			09/26/16 14:35	200
Styrene	<200		200		ug/L			09/26/16 14:35	200
1,1,2,2-Tetrachloroethane	<200		200		ug/L			09/26/16 14:35	200
<b>Tetrachloroethene</b>	<b>640</b>		200		ug/L			09/26/16 14:35	200
<b>Toluene</b>	<b>7200</b>		200		ug/L			09/26/16 14:35	200
trans-1,2-Dichloroethene	<200		200		ug/L			09/26/16 14:35	200
trans-1,3-Dichloropropene	<200		200		ug/L			09/26/16 14:35	200
1,1,1-Trichloroethane	<200		200		ug/L			09/26/16 14:35	200
1,1,2-Trichloroethane	<200		200		ug/L			09/26/16 14:35	200
<b>Trichloroethene</b>	<b>850</b>		200		ug/L			09/26/16 14:35	200
<b>Vinyl chloride</b>	<b>2400</b>		200		ug/L			09/26/16 14:35	200
<b>Xylenes, Total</b>	<b>4800</b>		200		ug/L			09/26/16 14:35	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Toluene-d8 (Surr)	100		80 - 120					09/26/16 14:35	200
1,2-Dichloroethane-d4 (Surr)	101		73 - 131					09/26/16 14:35	200
Dibromofluoromethane (Surr)	97		80 - 122					09/26/16 14:35	200
4-Bromofluorobenzene (Surr)	103		80 - 120					09/26/16 14:35	200

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-11**

**Date Collected: 09/19/16 17:35**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-7**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<2000		2000		ug/L			09/26/16 14:55	200
Benzene	<200		200		ug/L			09/26/16 14:55	200
Bromoform	<200		200		ug/L			09/26/16 14:55	200
Bromomethane	<1000		1000		ug/L			09/26/16 14:55	200
2-Butanone (MEK)	<2000		2000		ug/L			09/26/16 14:55	200
Carbon disulfide	<400		400		ug/L			09/26/16 14:55	200
Carbon tetrachloride	<200		200		ug/L			09/26/16 14:55	200
Chlorobenzene	<200		200		ug/L			09/26/16 14:55	200
Chlorodibromomethane	<200		200		ug/L			09/26/16 14:55	200
Chloroethane	<1000		1000		ug/L			09/26/16 14:55	200
Chloroform	<200		200		ug/L			09/26/16 14:55	200
Chloromethane	<200		200		ug/L			09/26/16 14:55	200
<b>cis-1,2-Dichloroethene</b>	<b>7400</b>		200		ug/L			09/26/16 14:55	200
cis-1,3-Dichloropropene	<200		200		ug/L			09/26/16 14:55	200
1,2-Dichlorobenzene	<200		200		ug/L			09/26/16 14:55	200
1,4-Dichlorobenzene	<200		200		ug/L			09/26/16 14:55	200
Dichlorobromomethane	<200		200		ug/L			09/26/16 14:55	200
1,1-Dichloroethane	<200		200		ug/L			09/26/16 14:55	200
1,2-Dichloroethane	<200		200		ug/L			09/26/16 14:55	200
<b>1,1-Dichloroethene</b>	<b>2200</b>		200		ug/L			09/26/16 14:55	200
1,2-Dichloropropane	<200		200		ug/L			09/26/16 14:55	200
Ethylbenzene	<200		200		ug/L			09/26/16 14:55	200
2-Hexanone	<2000		2000		ug/L			09/26/16 14:55	200
Methylene Chloride	<1000		1000		ug/L			09/26/16 14:55	200
4-Methyl-2-pentanone (MIBK)	<2000		2000		ug/L			09/26/16 14:55	200
Styrene	<200		200		ug/L			09/26/16 14:55	200
1,1,2,2-Tetrachloroethane	<200		200		ug/L			09/26/16 14:55	200
<b>Tetrachloroethene</b>	<b>5700</b>		200		ug/L			09/26/16 14:55	200
Toluene	<200		200		ug/L			09/26/16 14:55	200
trans-1,2-Dichloroethene	<200		200		ug/L			09/26/16 14:55	200
trans-1,3-Dichloropropene	<200		200		ug/L			09/26/16 14:55	200
1,1,1-Trichloroethane	<200		200		ug/L			09/26/16 14:55	200
1,1,2-Trichloroethane	<200		200		ug/L			09/26/16 14:55	200
<b>Trichloroethene</b>	<b>12000</b>		200		ug/L			09/26/16 14:55	200
Vinyl chloride	<200		200		ug/L			09/26/16 14:55	200
Xylenes, Total	<200		200		ug/L			09/26/16 14:55	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120			200
1,2-Dichloroethane-d4 (Surr)	101		73 - 131			200
Dibromofluoromethane (Surr)	96		80 - 122			200
4-Bromofluorobenzene (Surr)	106		80 - 120			200

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-11**

**Date Collected: 09/19/16 17:35**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-7**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Acenaphthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Acenaphthylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Benzo[a]anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Benzo[a]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Benzo[b]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Benzo[k]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Chrysene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Fluorene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Naphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Phenanthrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:06		1
Bis(2-ethylhexyl) phthalate	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:06		1
<b>1,2,4-Trichlorobenzene</b>	<b>1.6</b>		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
<b>1,2-Dichlorobenzene</b>	<b>2.6</b>		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
1,3-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
<b>1,4-Dichlorobenzene</b>	<b>3.1</b>		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
bis(chloroisopropyl) ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4,5-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4-Dichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4-Dimethylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4-Dinitrophenol	<9.6		9.6		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,4-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2,6-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2-Chloronaphthalene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2-Chlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2-Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:06		1
2-Nitroaniline	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
2-Nitrophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
3 & 4 Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:06		1
3,3'-Dichlorobenzidine	<19 *		19		ug/L	09/23/16 13:09	09/25/16 20:06		1
3-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:06		1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Bromophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Chloroaniline	<3.8		3.8		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Chlorophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:06		1
4-Nitrophenol	<7.7		7.7		ug/L	09/23/16 13:09	09/25/16 20:06		1
Bis(2-chloroethoxy)methane	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
Bis(2-chloroethyl)ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
Butyl benzyl phthalate	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:06		1
Carbazole	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:06		1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-11**

**Date Collected: 09/19/16 17:35**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-7**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Diethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Dimethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Hexachlorobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Hexachlorobutadiene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Hexachlorocyclopentadiene	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 20:06	1
Hexachloroethane	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Isophorone	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Nitrobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Pentachlorophenol	<4.8		4.8		ug/L		09/23/16 13:09	09/25/16 20:06	1
Phenol	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Di-n-octyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
N-Nitrosodi-n-propylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
N-Nitrosodiphenylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:06	1
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Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	72		20 - 113				09/23/16 13:09	09/25/16 20:06	1
Nitrobenzene-d5	80		37 - 103				09/23/16 13:09	09/25/16 20:06	1
Terphenyl-d14	83		22 - 121				09/23/16 13:09	09/25/16 20:06	1
2,4,6-Tribromophenol	85		39 - 133				09/23/16 13:09	09/25/16 20:06	1
2-Fluorophenol	73		18 - 112				09/23/16 13:09	09/25/16 20:06	1
2-Fluorobiphenyl	78		31 - 107				09/23/16 13:09	09/25/16 20:06	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-11**

Date Collected: 09/19/16 17:35

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-7**

Matrix: Water

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	280		38		ug/L		09/23/16 13:09	09/26/16 18:42	20

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-12**

**Date Collected: 09/20/16 09:20**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-8**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/27/16 12:12	1
Benzene	<1.0		1.0		ug/L			09/27/16 12:12	1
Bromoform	<1.0 *		1.0		ug/L			09/27/16 12:12	1
Bromomethane	<5.0		5.0		ug/L			09/27/16 12:12	1
2-Butanone (MEK)	<10		10		ug/L			09/27/16 12:12	1
Carbon disulfide	<2.0		2.0		ug/L			09/27/16 12:12	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/27/16 12:12	1
Chlorobenzene	<1.0		1.0		ug/L			09/27/16 12:12	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/27/16 12:12	1
Chloroethane	<5.0		5.0		ug/L			09/27/16 12:12	1
Chloroform	<1.0		1.0		ug/L			09/27/16 12:12	1
Chloromethane	<1.0 *		1.0		ug/L			09/27/16 12:12	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:12	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:12	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:12	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:12	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/27/16 12:12	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/27/16 12:12	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/27/16 12:12	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:12	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/27/16 12:12	1
Ethylbenzene	<1.0		1.0		ug/L			09/27/16 12:12	1
2-Hexanone	<10		10		ug/L			09/27/16 12:12	1
Methylene Chloride	<5.0 *		5.0		ug/L			09/27/16 12:12	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/27/16 12:12	1
Styrene	<1.0		1.0		ug/L			09/27/16 12:12	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/27/16 12:12	1
<b>Tetrachloroethene</b>	<b>9.3</b>		1.0		ug/L			09/27/16 12:12	1
Toluene	<1.0		1.0		ug/L			09/27/16 12:12	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:12	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:12	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:12	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:12	1
<b>Trichloroethene</b>	<b>21</b>		1.0		ug/L			09/27/16 12:12	1
Vinyl chloride	<1.0		1.0		ug/L			09/27/16 12:12	1
Xylenes, Total	<1.0		1.0		ug/L			09/27/16 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/27/16 12:12	1
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		09/27/16 12:12	1
Dibromofluoromethane (Surr)	101		80 - 122		09/27/16 12:12	1
4-Bromofluorobenzene (Surr)	100		80 - 120		09/27/16 12:12	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-12D**

Date Collected: 09/20/16 08:45

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-9**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<500		500		ug/L			09/27/16 13:42	50
Benzene	<50		50		ug/L			09/27/16 13:42	50
Bromoform	<50 *		50		ug/L			09/27/16 13:42	50
Bromomethane	<250		250		ug/L			09/27/16 13:42	50
2-Butanone (MEK)	<500		500		ug/L			09/27/16 13:42	50
Carbon disulfide	<100		100		ug/L			09/27/16 13:42	50
Carbon tetrachloride	<50		50		ug/L			09/27/16 13:42	50
Chlorobenzene	<50		50		ug/L			09/27/16 13:42	50
Chlorodibromomethane	<50		50		ug/L			09/27/16 13:42	50
Chloroethane	<250		250		ug/L			09/27/16 13:42	50
Chloroform	<50		50		ug/L			09/27/16 13:42	50
Chloromethane	<50 *		50		ug/L			09/27/16 13:42	50
<b>cis-1,2-Dichloroethene</b>	<b>350</b>		50		ug/L			09/27/16 13:42	50
cis-1,3-Dichloropropene	<50		50		ug/L			09/27/16 13:42	50
1,2-Dichlorobenzene	<50		50		ug/L			09/27/16 13:42	50
1,4-Dichlorobenzene	<50		50		ug/L			09/27/16 13:42	50
Dichlorobromomethane	<50		50		ug/L			09/27/16 13:42	50
1,1-Dichloroethane	<50		50		ug/L			09/27/16 13:42	50
1,2-Dichloroethane	<50		50		ug/L			09/27/16 13:42	50
<b>1,1-Dichloroethene</b>	<b>280</b>		50		ug/L			09/27/16 13:42	50
1,2-Dichloropropane	<50		50		ug/L			09/27/16 13:42	50
Ethylbenzene	<50		50		ug/L			09/27/16 13:42	50
2-Hexanone	<500		500		ug/L			09/27/16 13:42	50
Methylene Chloride	<250 *		250		ug/L			09/27/16 13:42	50
4-Methyl-2-pentanone (MIBK)	<500		500		ug/L			09/27/16 13:42	50
Styrene	<50		50		ug/L			09/27/16 13:42	50
1,1,2,2-Tetrachloroethane	<50		50		ug/L			09/27/16 13:42	50
<b>Tetrachloroethene</b>	<b>880</b>		50		ug/L			09/27/16 13:42	50
Toluene	<50		50		ug/L			09/27/16 13:42	50
trans-1,2-Dichloroethene	<50		50		ug/L			09/27/16 13:42	50
trans-1,3-Dichloropropene	<50		50		ug/L			09/27/16 13:42	50
1,1,1-Trichloroethane	<50		50		ug/L			09/27/16 13:42	50
1,1,2-Trichloroethane	<50		50		ug/L			09/27/16 13:42	50
<b>Trichloroethene</b>	<b>5100</b>		50		ug/L			09/27/16 13:42	50
Vinyl chloride	<50		50		ug/L			09/27/16 13:42	50
Xylenes, Total	<50		50		ug/L			09/27/16 13:42	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	98		80 - 120					09/27/16 13:42	50
1,2-Dichloroethane-d4 (Surr)	104		73 - 131					09/27/16 13:42	50
Dibromofluoromethane (Surr)	108		80 - 122					09/27/16 13:42	50
4-Bromofluorobenzene (Surr)	99		80 - 120					09/27/16 13:42	50

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-12D**

**Date Collected: 09/20/16 08:45**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-9**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Acenaphthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Acenaphthylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Benzo[a]anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Benzo[a]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Benzo[b]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Benzo[k]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Chrysene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Fluorene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Naphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Phenanthrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:29		1
Bis(2-ethylhexyl) phthalate	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:29		1
1,2,4-Trichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
<b>1,2-Dichlorobenzene</b>	<b>1.5</b>		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
1,3-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
1,4-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
bis(chloroisopropyl) ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4,5-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4-Dichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4-Dimethylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4-Dinitrophenol	<9.6		9.6		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,4-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2,6-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2-Chloronaphthalene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2-Chlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2-Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:29		1
2-Nitroaniline	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
2-Nitrophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
3 & 4 Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:29		1
3,3'-Dichlorobenzidine	<19 *		19		ug/L	09/23/16 13:09	09/25/16 20:29		1
3-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:29		1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Bromophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Chloroaniline	<3.8		3.8		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Chlorophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:29		1
4-Nitrophenol	<7.6		7.6		ug/L	09/23/16 13:09	09/25/16 20:29		1
Bis(2-chloroethoxy)methane	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
Bis(2-chloroethyl)ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
Butyl benzyl phthalate	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:29		1
Carbazole	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:29		1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-12D**

**Date Collected: 09/20/16 08:45**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-9**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Diethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Dimethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Hexachlorobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Hexachlorobutadiene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Hexachlorocyclopentadiene	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 20:29	1
Hexachloroethane	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Isophorone	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Nitrobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Pentachlorophenol	<4.8		4.8		ug/L		09/23/16 13:09	09/25/16 20:29	1
Phenol	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Di-n-octyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
N-Nitrosodi-n-propylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
N-Nitrosodiphenylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:29	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	69		20 - 113				09/23/16 13:09	09/25/16 20:29	1
Nitrobenzene-d5	81		37 - 103				09/23/16 13:09	09/25/16 20:29	1
Terphenyl-d14	64		22 - 121				09/23/16 13:09	09/25/16 20:29	1
2,4,6-Tribromophenol	88		39 - 133				09/23/16 13:09	09/25/16 20:29	1
2-Fluorophenol	73		18 - 112				09/23/16 13:09	09/25/16 20:29	1
2-Fluorobiphenyl	81		31 - 107				09/23/16 13:09	09/25/16 20:29	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-12D**

Date Collected: 09/20/16 08:45

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-9**

Matrix: Water

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	530		96		ug/L		09/23/16 13:09	09/26/16 19:06	50

1

2

3

4

5

6

7

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11

12

13

14

15

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-16**

**Date Collected: 09/20/16 13:05**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-10**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10000		10000		ug/L			09/27/16 14:04	1000
Benzene	<1000		1000		ug/L			09/27/16 14:04	1000
Bromoform	<1000 *		1000		ug/L			09/27/16 14:04	1000
Bromomethane	<5000		5000		ug/L			09/27/16 14:04	1000
2-Butanone (MEK)	<10000		10000		ug/L			09/27/16 14:04	1000
Carbon disulfide	<2000		2000		ug/L			09/27/16 14:04	1000
Carbon tetrachloride	<1000		1000		ug/L			09/27/16 14:04	1000
Chlorobenzene	<1000		1000		ug/L			09/27/16 14:04	1000
Chlorodibromomethane	<1000		1000		ug/L			09/27/16 14:04	1000
Chloroethane	<5000		5000		ug/L			09/27/16 14:04	1000
Chloroform	<1000		1000		ug/L			09/27/16 14:04	1000
Chloromethane	<1000 *		1000		ug/L			09/27/16 14:04	1000
cis-1,2-Dichloroethene	<1000		1000		ug/L			09/27/16 14:04	1000
cis-1,3-Dichloropropene	<1000		1000		ug/L			09/27/16 14:04	1000
1,2-Dichlorobenzene	<1000		1000		ug/L			09/27/16 14:04	1000
1,4-Dichlorobenzene	<1000		1000		ug/L			09/27/16 14:04	1000
Dichlorobromomethane	<1000		1000		ug/L			09/27/16 14:04	1000
1,1-Dichloroethane	<1000		1000		ug/L			09/27/16 14:04	1000
1,2-Dichloroethane	<1000		1000		ug/L			09/27/16 14:04	1000
1,1-Dichloroethene	<1000		1000		ug/L			09/27/16 14:04	1000
1,2-Dichloropropane	<1000		1000		ug/L			09/27/16 14:04	1000
Ethylbenzene	<1000		1000		ug/L			09/27/16 14:04	1000
2-Hexanone	<10000		10000		ug/L			09/27/16 14:04	1000
Methylene Chloride	<5000 *		5000		ug/L			09/27/16 14:04	1000
4-Methyl-2-pentanone (MIBK)	<10000		10000		ug/L			09/27/16 14:04	1000
Styrene	<1000		1000		ug/L			09/27/16 14:04	1000
1,1,2,2-Tetrachloroethane	<1000		1000		ug/L			09/27/16 14:04	1000
<b>Tetrachloroethene</b>	<b>53000</b>		1000		ug/L			09/27/16 14:04	1000
Toluene	<1000		1000		ug/L			09/27/16 14:04	1000
trans-1,2-Dichloroethene	<1000		1000		ug/L			09/27/16 14:04	1000
trans-1,3-Dichloropropene	<1000		1000		ug/L			09/27/16 14:04	1000
1,1,1-Trichloroethane	<1000		1000		ug/L			09/27/16 14:04	1000
1,1,2-Trichloroethane	<1000		1000		ug/L			09/27/16 14:04	1000
Trichloroethene	<1000		1000		ug/L			09/27/16 14:04	1000
Vinyl chloride	<1000		1000		ug/L			09/27/16 14:04	1000
Xylenes, Total	<1000		1000		ug/L			09/27/16 14:04	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120			1000
1,2-Dichloroethane-d4 (Surr)	105		73 - 131			1000
Dibromofluoromethane (Surr)	108		80 - 122			1000
4-Bromofluorobenzene (Surr)	100		80 - 120			1000

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-17D**

Date Collected: 09/19/16 08:15

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-11**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<250		250		ug/L			09/27/16 14:27	25
Benzene	<25		25		ug/L			09/27/16 14:27	25
Bromoform	<25 *		25		ug/L			09/27/16 14:27	25
Bromomethane	<130		130		ug/L			09/27/16 14:27	25
2-Butanone (MEK)	<250		250		ug/L			09/27/16 14:27	25
Carbon disulfide	<50		50		ug/L			09/27/16 14:27	25
Carbon tetrachloride	<25		25		ug/L			09/27/16 14:27	25
Chlorobenzene	<25		25		ug/L			09/27/16 14:27	25
Chlorodibromomethane	<25		25		ug/L			09/27/16 14:27	25
Chloroethane	<130		130		ug/L			09/27/16 14:27	25
Chloroform	<25		25		ug/L			09/27/16 14:27	25
Chloromethane	<25 *		25		ug/L			09/27/16 14:27	25
<b>cis-1,2-Dichloroethene</b>	<b>270</b>		25		ug/L			09/27/16 14:27	25
cis-1,3-Dichloropropene	<25		25		ug/L			09/27/16 14:27	25
1,2-Dichlorobenzene	<25		25		ug/L			09/27/16 14:27	25
1,4-Dichlorobenzene	<25		25		ug/L			09/27/16 14:27	25
Dichlorobromomethane	<25		25		ug/L			09/27/16 14:27	25
1,1-Dichloroethane	<25		25		ug/L			09/27/16 14:27	25
1,2-Dichloroethane	<25		25		ug/L			09/27/16 14:27	25
<b>1,1-Dichloroethene</b>	<b>100</b>		25		ug/L			09/27/16 14:27	25
1,2-Dichloropropane	<25		25		ug/L			09/27/16 14:27	25
Ethylbenzene	<25		25		ug/L			09/27/16 14:27	25
2-Hexanone	<250		250		ug/L			09/27/16 14:27	25
Methylene Chloride	<130 *		130		ug/L			09/27/16 14:27	25
4-Methyl-2-pentanone (MIBK)	<250		250		ug/L			09/27/16 14:27	25
Styrene	<25		25		ug/L			09/27/16 14:27	25
1,1,2,2-Tetrachloroethane	<25		25		ug/L			09/27/16 14:27	25
<b>Tetrachloroethene</b>	<b>3000</b>		25		ug/L			09/27/16 14:27	25
Toluene	<25		25		ug/L			09/27/16 14:27	25
trans-1,2-Dichloroethene	<25		25		ug/L			09/27/16 14:27	25
trans-1,3-Dichloropropene	<25		25		ug/L			09/27/16 14:27	25
1,1,1-Trichloroethane	<25		25		ug/L			09/27/16 14:27	25
1,1,2-Trichloroethane	<25		25		ug/L			09/27/16 14:27	25
<b>Trichloroethene</b>	<b>1400</b>		25		ug/L			09/27/16 14:27	25
Vinyl chloride	<25		25		ug/L			09/27/16 14:27	25
Xylenes, Total	<25		25		ug/L			09/27/16 14:27	25
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	94		80 - 120				09/27/16 14:27	25	
1,2-Dichloroethane-d4 (Surr)	107		73 - 131				09/27/16 14:27	25	
Dibromofluoromethane (Surr)	110		80 - 122				09/27/16 14:27	25	
4-Bromofluorobenzene (Surr)	99		80 - 120				09/27/16 14:27	25	

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-19**

**Date Collected: 09/20/16 10:15**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-12**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<2000		2000		ug/L			09/27/16 14:49	200
<b>Benzene</b>	<b>220</b>		200		ug/L			09/27/16 14:49	200
Bromoform	<200 *		200		ug/L			09/27/16 14:49	200
Bromomethane	<1000		1000		ug/L			09/27/16 14:49	200
2-Butanone (MEK)	<2000		2000		ug/L			09/27/16 14:49	200
Carbon disulfide	<400		400		ug/L			09/27/16 14:49	200
Carbon tetrachloride	<200		200		ug/L			09/27/16 14:49	200
Chlorobenzene	<200		200		ug/L			09/27/16 14:49	200
Chlorodibromomethane	<200		200		ug/L			09/27/16 14:49	200
Chloroethane	<1000		1000		ug/L			09/27/16 14:49	200
Chloroform	<200		200		ug/L			09/27/16 14:49	200
Chloromethane	<200 *		200		ug/L			09/27/16 14:49	200
<b>cis-1,2-Dichloroethene</b>	<b>2300</b>		200		ug/L			09/27/16 14:49	200
cis-1,3-Dichloropropene	<200		200		ug/L			09/27/16 14:49	200
1,2-Dichlorobenzene	<200		200		ug/L			09/27/16 14:49	200
1,4-Dichlorobenzene	<200		200		ug/L			09/27/16 14:49	200
Dichlorobromomethane	<200		200		ug/L			09/27/16 14:49	200
1,1-Dichloroethane	<200		200		ug/L			09/27/16 14:49	200
1,2-Dichloroethane	<200		200		ug/L			09/27/16 14:49	200
<b>1,1-Dichloroethene</b>	<b>780</b>		200		ug/L			09/27/16 14:49	200
1,2-Dichloropropane	<200		200		ug/L			09/27/16 14:49	200
Ethylbenzene	<200		200		ug/L			09/27/16 14:49	200
2-Hexanone	<2000		2000		ug/L			09/27/16 14:49	200
Methylene Chloride	<1000 *		1000		ug/L			09/27/16 14:49	200
4-Methyl-2-pentanone (MIBK)	<2000		2000		ug/L			09/27/16 14:49	200
Styrene	<200		200		ug/L			09/27/16 14:49	200
1,1,2,2-Tetrachloroethane	<200		200		ug/L			09/27/16 14:49	200
<b>Tetrachloroethene</b>	<b>20000</b>		200		ug/L			09/27/16 14:49	200
Toluene	<200		200		ug/L			09/27/16 14:49	200
trans-1,2-Dichloroethene	<200		200		ug/L			09/27/16 14:49	200
trans-1,3-Dichloropropene	<200		200		ug/L			09/27/16 14:49	200
1,1,1-Trichloroethane	<200		200		ug/L			09/27/16 14:49	200
1,1,2-Trichloroethane	<200		200		ug/L			09/27/16 14:49	200
<b>Trichloroethene</b>	<b>4500</b>		200		ug/L			09/27/16 14:49	200
Vinyl chloride	<200		200		ug/L			09/27/16 14:49	200
Xylenes, Total	<200		200		ug/L			09/27/16 14:49	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120			200
1,2-Dichloroethane-d4 (Surr)	110		73 - 131			200
Dibromofluoromethane (Surr)	112		80 - 122			200
4-Bromofluorobenzene (Surr)	99		80 - 120			200

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-22**

**Date Collected: 09/20/16 07:40**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-13**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<100		100		ug/L			09/27/16 15:12	10
Benzene	<10		10		ug/L			09/27/16 15:12	10
Bromoform	<10 *		10		ug/L			09/27/16 15:12	10
Bromomethane	<50		50		ug/L			09/27/16 15:12	10
2-Butanone (MEK)	<100		100		ug/L			09/27/16 15:12	10
Carbon disulfide	<20		20		ug/L			09/27/16 15:12	10
Carbon tetrachloride	<10		10		ug/L			09/27/16 15:12	10
Chlorobenzene	<10		10		ug/L			09/27/16 15:12	10
Chlorodibromomethane	<10		10		ug/L			09/27/16 15:12	10
Chloroethane	<50		50		ug/L			09/27/16 15:12	10
Chloroform	<10		10		ug/L			09/27/16 15:12	10
Chloromethane	<10 *		10		ug/L			09/27/16 15:12	10
<b>cis-1,2-Dichloroethene</b>	<b>490</b>		10		ug/L			09/27/16 15:12	10
cis-1,3-Dichloropropene	<10		10		ug/L			09/27/16 15:12	10
1,2-Dichlorobenzene	<10		10		ug/L			09/27/16 15:12	10
1,4-Dichlorobenzene	<10		10		ug/L			09/27/16 15:12	10
Dichlorobromomethane	<10		10		ug/L			09/27/16 15:12	10
<b>1,1-Dichloroethane</b>	<b>13</b>		10		ug/L			09/27/16 15:12	10
1,2-Dichloroethane	<10		10		ug/L			09/27/16 15:12	10
<b>1,1-Dichloroethene</b>	<b>200</b>		10		ug/L			09/27/16 15:12	10
1,2-Dichloropropane	<10		10		ug/L			09/27/16 15:12	10
Ethylbenzene	<10		10		ug/L			09/27/16 15:12	10
2-Hexanone	<100		100		ug/L			09/27/16 15:12	10
Methylene Chloride	<50 *		50		ug/L			09/27/16 15:12	10
4-Methyl-2-pentanone (MIBK)	<100		100		ug/L			09/27/16 15:12	10
Styrene	<10		10		ug/L			09/27/16 15:12	10
1,1,2,2-Tetrachloroethane	<10		10		ug/L			09/27/16 15:12	10
<b>Tetrachloroethene</b>	<b>1200</b>		10		ug/L			09/27/16 15:12	10
Toluene	<10		10		ug/L			09/27/16 15:12	10
trans-1,2-Dichloroethene	<10		10		ug/L			09/27/16 15:12	10
trans-1,3-Dichloropropene	<10		10		ug/L			09/27/16 15:12	10
1,1,1-Trichloroethane	<10		10		ug/L			09/27/16 15:12	10
1,1,2-Trichloroethane	<10		10		ug/L			09/27/16 15:12	10
<b>Trichloroethene</b>	<b>560</b>		10		ug/L			09/27/16 15:12	10
Vinyl chloride	<10		10		ug/L			09/27/16 15:12	10
Xylenes, Total	<10		10		ug/L			09/27/16 15:12	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		80 - 120		09/27/16 15:12	10
1,2-Dichloroethane-d4 (Surr)	116		73 - 131		09/27/16 15:12	10
Dibromofluoromethane (Surr)	116		80 - 122		09/27/16 15:12	10
4-Bromofluorobenzene (Surr)	98		80 - 120		09/27/16 15:12	10

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-22BR**

Date Collected: 09/20/16 07:18

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-14**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>28</b>		20		ug/L			09/27/16 15:34	2
Benzene	<2.0		2.0		ug/L			09/27/16 15:34	2
Bromoform	<2.0 *		2.0		ug/L			09/27/16 15:34	2
Bromomethane	<10		10		ug/L			09/27/16 15:34	2
2-Butanone (MEK)	<20		20		ug/L			09/27/16 15:34	2
Carbon disulfide	<4.0		4.0		ug/L			09/27/16 15:34	2
Carbon tetrachloride	<2.0		2.0		ug/L			09/27/16 15:34	2
Chlorobenzene	<2.0		2.0		ug/L			09/27/16 15:34	2
Chlorodibromomethane	<2.0		2.0		ug/L			09/27/16 15:34	2
Chloroethane	<10		10		ug/L			09/27/16 15:34	2
Chloroform	<2.0		2.0		ug/L			09/27/16 15:34	2
Chloromethane	<2.0 *		2.0		ug/L			09/27/16 15:34	2
<b>cis-1,2-Dichloroethene</b>	<b>57</b>		2.0		ug/L			09/27/16 15:34	2
cis-1,3-Dichloropropene	<2.0		2.0		ug/L			09/27/16 15:34	2
1,2-Dichlorobenzene	<2.0		2.0		ug/L			09/27/16 15:34	2
1,4-Dichlorobenzene	<2.0		2.0		ug/L			09/27/16 15:34	2
Dichlorobromomethane	<2.0		2.0		ug/L			09/27/16 15:34	2
<b>1,1-Dichloroethane</b>	<b>9.4</b>		2.0		ug/L			09/27/16 15:34	2
1,2-Dichloroethane	<2.0		2.0		ug/L			09/27/16 15:34	2
<b>1,1-Dichloroethene</b>	<b>130</b>		2.0		ug/L			09/27/16 15:34	2
1,2-Dichloropropane	<2.0		2.0		ug/L			09/27/16 15:34	2
Ethylbenzene	<2.0		2.0		ug/L			09/27/16 15:34	2
2-Hexanone	<20		20		ug/L			09/27/16 15:34	2
Methylene Chloride	<10 *		10		ug/L			09/27/16 15:34	2
4-Methyl-2-pentanone (MIBK)	<20		20		ug/L			09/27/16 15:34	2
Styrene	<2.0		2.0		ug/L			09/27/16 15:34	2
1,1,2,2-Tetrachloroethane	<2.0		2.0		ug/L			09/27/16 15:34	2
Toluene	<2.0		2.0		ug/L			09/27/16 15:34	2
trans-1,2-Dichloroethene	<2.0		2.0		ug/L			09/27/16 15:34	2
trans-1,3-Dichloropropene	<2.0		2.0		ug/L			09/27/16 15:34	2
1,1,1-Trichloroethane	<2.0		2.0		ug/L			09/27/16 15:34	2
1,1,2-Trichloroethane	<2.0		2.0		ug/L			09/27/16 15:34	2
<b>Trichloroethene</b>	<b>260</b>		2.0		ug/L			09/27/16 15:34	2
Vinyl chloride	<2.0		2.0		ug/L			09/27/16 15:34	2
Xylenes, Total	<2.0		2.0		ug/L			09/27/16 15:34	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	93		80 - 120				09/27/16 15:34	2	
1,2-Dichloroethane-d4 (Surr)	119		73 - 131				09/27/16 15:34	2	
Dibromofluoromethane (Surr)	117		80 - 122				09/27/16 15:34	2	
4-Bromofluorobenzene (Surr)	99		80 - 120				09/27/16 15:34	2	

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-22BR**

Date Collected: 09/20/16 07:18

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-14**

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	370		10		ug/L			09/28/16 12:25	10
<hr/>									
<b>Surrogate</b>									
Toluene-d8 (Surr)	99		80 - 120				Prepared	09/28/16 12:25	10
1,2-Dichloroethane-d4 (Surr)	107		73 - 131					09/28/16 12:25	10
Dibromofluoromethane (Surr)	101		80 - 122					09/28/16 12:25	10
4-Bromofluorobenzene (Surr)	106		80 - 120					09/28/16 12:25	10

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-27S**

Date Collected: 09/20/16 10:40

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-15**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<100		100		ug/L			09/27/16 15:57	10
Benzene	<10		10		ug/L			09/27/16 15:57	10
Bromoform	<10 *		10		ug/L			09/27/16 15:57	10
Bromomethane	<50		50		ug/L			09/27/16 15:57	10
2-Butanone (MEK)	<100		100		ug/L			09/27/16 15:57	10
Carbon disulfide	<20		20		ug/L			09/27/16 15:57	10
Carbon tetrachloride	<10		10		ug/L			09/27/16 15:57	10
Chlorobenzene	<10		10		ug/L			09/27/16 15:57	10
Chlorodibromomethane	<10		10		ug/L			09/27/16 15:57	10
Chloroethane	<50		50		ug/L			09/27/16 15:57	10
Chloroform	<10		10		ug/L			09/27/16 15:57	10
Chloromethane	<10 *		10		ug/L			09/27/16 15:57	10
<b>cis-1,2-Dichloroethene</b>	<b>71</b>		10		ug/L			09/27/16 15:57	10
cis-1,3-Dichloropropene	<10		10		ug/L			09/27/16 15:57	10
1,2-Dichlorobenzene	<10		10		ug/L			09/27/16 15:57	10
1,4-Dichlorobenzene	<10		10		ug/L			09/27/16 15:57	10
Dichlorobromomethane	<10		10		ug/L			09/27/16 15:57	10
1,1-Dichloroethane	<10		10		ug/L			09/27/16 15:57	10
1,2-Dichloroethane	<10		10		ug/L			09/27/16 15:57	10
<b>1,1-Dichloroethene</b>	<b>76</b>		10		ug/L			09/27/16 15:57	10
1,2-Dichloropropane	<10		10		ug/L			09/27/16 15:57	10
Ethylbenzene	<10		10		ug/L			09/27/16 15:57	10
2-Hexanone	<100		100		ug/L			09/27/16 15:57	10
Methylene Chloride	<50 *		50		ug/L			09/27/16 15:57	10
4-Methyl-2-pentanone (MIBK)	<100		100		ug/L			09/27/16 15:57	10
Styrene	<10		10		ug/L			09/27/16 15:57	10
1,1,2,2-Tetrachloroethane	<10		10		ug/L			09/27/16 15:57	10
<b>Tetrachloroethene</b>	<b>1100</b>		10		ug/L			09/27/16 15:57	10
Toluene	<10		10		ug/L			09/27/16 15:57	10
trans-1,2-Dichloroethene	<10		10		ug/L			09/27/16 15:57	10
trans-1,3-Dichloropropene	<10		10		ug/L			09/27/16 15:57	10
1,1,1-Trichloroethane	<10		10		ug/L			09/27/16 15:57	10
1,1,2-Trichloroethane	<10		10		ug/L			09/27/16 15:57	10
<b>Trichloroethene</b>	<b>540</b>		10		ug/L			09/27/16 15:57	10
Vinyl chloride	<10		10		ug/L			09/27/16 15:57	10
Xylenes, Total	<10		10		ug/L			09/27/16 15:57	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		80 - 120		09/27/16 15:57	10
1,2-Dichloroethane-d4 (Surr)	115		73 - 131		09/27/16 15:57	10
Dibromofluoromethane (Surr)	117		80 - 122		09/27/16 15:57	10
4-Bromofluorobenzene (Surr)	98		80 - 120		09/27/16 15:57	10

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-27D**

Date Collected: 09/20/16 11:30

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-16**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<200		200		ug/L			09/27/16 16:19	20
Benzene	<20		20		ug/L			09/27/16 16:19	20
Bromoform	<20 *		20		ug/L			09/27/16 16:19	20
Bromomethane	<100		100		ug/L			09/27/16 16:19	20
2-Butanone (MEK)	<200		200		ug/L			09/27/16 16:19	20
Carbon disulfide	<40		40		ug/L			09/27/16 16:19	20
Carbon tetrachloride	<20		20		ug/L			09/27/16 16:19	20
Chlorobenzene	<20		20		ug/L			09/27/16 16:19	20
Chlorodibromomethane	<20		20		ug/L			09/27/16 16:19	20
Chloroethane	<100		100		ug/L			09/27/16 16:19	20
Chloroform	<20		20		ug/L			09/27/16 16:19	20
Chloromethane	<20 *		20		ug/L			09/27/16 16:19	20
<b>cis-1,2-Dichloroethene</b>	<b>250</b>		20		ug/L			09/27/16 16:19	20
cis-1,3-Dichloropropene	<20		20		ug/L			09/27/16 16:19	20
1,2-Dichlorobenzene	<20		20		ug/L			09/27/16 16:19	20
1,4-Dichlorobenzene	<20		20		ug/L			09/27/16 16:19	20
Dichlorobromomethane	<20		20		ug/L			09/27/16 16:19	20
1,1-Dichloroethane	<20		20		ug/L			09/27/16 16:19	20
1,2-Dichloroethane	<20		20		ug/L			09/27/16 16:19	20
<b>1,1-Dichloroethene</b>	<b>130</b>		20		ug/L			09/27/16 16:19	20
1,2-Dichloropropane	<20		20		ug/L			09/27/16 16:19	20
Ethylbenzene	<20		20		ug/L			09/27/16 16:19	20
2-Hexanone	<200		200		ug/L			09/27/16 16:19	20
Methylene Chloride	<100 *		100		ug/L			09/27/16 16:19	20
4-Methyl-2-pentanone (MIBK)	<200		200		ug/L			09/27/16 16:19	20
Styrene	<20		20		ug/L			09/27/16 16:19	20
1,1,2,2-Tetrachloroethane	<20		20		ug/L			09/27/16 16:19	20
<b>Tetrachloroethene</b>	<b>1200</b>		20		ug/L			09/27/16 16:19	20
Toluene	<20		20		ug/L			09/27/16 16:19	20
trans-1,2-Dichloroethene	<20		20		ug/L			09/27/16 16:19	20
trans-1,3-Dichloropropene	<20		20		ug/L			09/27/16 16:19	20
1,1,1-Trichloroethane	<20		20		ug/L			09/27/16 16:19	20
1,1,2-Trichloroethane	<20		20		ug/L			09/27/16 16:19	20
<b>Trichloroethene</b>	<b>860</b>		20		ug/L			09/27/16 16:19	20
Vinyl chloride	<20		20		ug/L			09/27/16 16:19	20
Xylenes, Total	<20		20		ug/L			09/27/16 16:19	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	95		80 - 120				09/27/16 16:19	20	
1,2-Dichloroethane-d4 (Surr)	106		73 - 131				09/27/16 16:19	20	
Dibromofluoromethane (Surr)	110		80 - 122				09/27/16 16:19	20	
4-Bromofluorobenzene (Surr)	99		80 - 120				09/27/16 16:19	20	

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-29S**

Date Collected: 09/20/16 13:00

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-17**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/27/16 12:57	1
Benzene	<1.0		1.0		ug/L			09/27/16 12:57	1
Bromoform	<1.0 *		1.0		ug/L			09/27/16 12:57	1
Bromomethane	<5.0		5.0		ug/L			09/27/16 12:57	1
2-Butanone (MEK)	<10		10		ug/L			09/27/16 12:57	1
Carbon disulfide	<2.0		2.0		ug/L			09/27/16 12:57	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/27/16 12:57	1
Chlorobenzene	<1.0		1.0		ug/L			09/27/16 12:57	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/27/16 12:57	1
Chloroethane	<5.0		5.0		ug/L			09/27/16 12:57	1
Chloroform	<1.0		1.0		ug/L			09/27/16 12:57	1
Chloromethane	<1.0 *		1.0		ug/L			09/27/16 12:57	1
<b>cis-1,2-Dichloroethene</b>	<b>17</b>		1.0		ug/L			09/27/16 12:57	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:57	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:57	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:57	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/27/16 12:57	1
<b>1,1-Dichloroethane</b>	<b>1.8</b>		1.0		ug/L			09/27/16 12:57	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/27/16 12:57	1
<b>1,1-Dichloroethene</b>	<b>8.1</b>		1.0		ug/L			09/27/16 12:57	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/27/16 12:57	1
Ethylbenzene	<1.0		1.0		ug/L			09/27/16 12:57	1
2-Hexanone	<10		10		ug/L			09/27/16 12:57	1
Methylene Chloride	<5.0 *		5.0		ug/L			09/27/16 12:57	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/27/16 12:57	1
Styrene	<1.0		1.0		ug/L			09/27/16 12:57	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/27/16 12:57	1
<b>Tetrachloroethene</b>	<b>80</b>		1.0		ug/L			09/27/16 12:57	1
Toluene	<1.0		1.0		ug/L			09/27/16 12:57	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:57	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:57	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:57	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:57	1
<b>Trichloroethene</b>	<b>32</b>		1.0		ug/L			09/27/16 12:57	1
Vinyl chloride	<1.0		1.0		ug/L			09/27/16 12:57	1
Xylenes, Total	<1.0		1.0		ug/L			09/27/16 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/27/16 12:57	1
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		09/27/16 12:57	1
Dibromofluoromethane (Surr)	102		80 - 122		09/27/16 12:57	1
4-Bromofluorobenzene (Surr)	100		80 - 120		09/27/16 12:57	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Client Sample ID: MW-29D

Date Collected: 09/20/16 13:30

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-18

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<50		50		ug/L			09/27/16 16:42	5
Benzene	<5.0		5.0		ug/L			09/27/16 16:42	5
Bromoform	<5.0 *		5.0		ug/L			09/27/16 16:42	5
Bromomethane	<25		25		ug/L			09/27/16 16:42	5
2-Butanone (MEK)	<50		50		ug/L			09/27/16 16:42	5
Carbon disulfide	<10		10		ug/L			09/27/16 16:42	5
Carbon tetrachloride	<5.0		5.0		ug/L			09/27/16 16:42	5
Chlorobenzene	<5.0		5.0		ug/L			09/27/16 16:42	5
Chlorodibromomethane	<5.0		5.0		ug/L			09/27/16 16:42	5
Chloroethane	<25		25		ug/L			09/27/16 16:42	5
Chloroform	<5.0		5.0		ug/L			09/27/16 16:42	5
Chloromethane	<5.0 *		5.0		ug/L			09/27/16 16:42	5
<b>cis-1,2-Dichloroethene</b>	<b>81</b>		5.0		ug/L			09/27/16 16:42	5
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			09/27/16 16:42	5
1,2-Dichlorobenzene	<5.0		5.0		ug/L			09/27/16 16:42	5
1,4-Dichlorobenzene	<5.0		5.0		ug/L			09/27/16 16:42	5
Dichlorobromomethane	<5.0		5.0		ug/L			09/27/16 16:42	5
<b>1,1-Dichloroethane</b>	<b>8.0</b>		5.0		ug/L			09/27/16 16:42	5
1,2-Dichloroethane	<5.0		5.0		ug/L			09/27/16 16:42	5
<b>1,1-Dichloroethene</b>	<b>39</b>		5.0		ug/L			09/27/16 16:42	5
1,2-Dichloropropane	<5.0		5.0		ug/L			09/27/16 16:42	5
Ethylbenzene	<5.0		5.0		ug/L			09/27/16 16:42	5
2-Hexanone	<50		50		ug/L			09/27/16 16:42	5
Methylene Chloride	<25 *		25		ug/L			09/27/16 16:42	5
4-Methyl-2-pentanone (MIBK)	<50		50		ug/L			09/27/16 16:42	5
Styrene	<5.0		5.0		ug/L			09/27/16 16:42	5
1,1,2,2-Tetrachloroethane	<5.0		5.0		ug/L			09/27/16 16:42	5
<b>Tetrachloroethene</b>	<b>390</b>		5.0		ug/L			09/27/16 16:42	5
Toluene	<5.0		5.0		ug/L			09/27/16 16:42	5
trans-1,2-Dichloroethene	<5.0		5.0		ug/L			09/27/16 16:42	5
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			09/27/16 16:42	5
1,1,1-Trichloroethane	<5.0		5.0		ug/L			09/27/16 16:42	5
1,1,2-Trichloroethane	<5.0		5.0		ug/L			09/27/16 16:42	5
<b>Trichloroethene</b>	<b>160</b>		5.0		ug/L			09/27/16 16:42	5
Vinyl chloride	<5.0		5.0		ug/L			09/27/16 16:42	5
Xylenes, Total	<5.0		5.0		ug/L			09/27/16 16:42	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	92		80 - 120				09/27/16 16:42	5	
1,2-Dichloroethane-d4 (Surr)	117		73 - 131				09/27/16 16:42	5	
Dibromofluoromethane (Surr)	117		80 - 122				09/27/16 16:42	5	
4-Bromofluorobenzene (Surr)	99		80 - 120				09/27/16 16:42	5	

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: MW-30**

**Date Collected: 09/20/16 14:20**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-19**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/27/16 12:34	1
Benzene	<1.0		1.0		ug/L			09/27/16 12:34	1
Bromoform	<1.0 *		1.0		ug/L			09/27/16 12:34	1
Bromomethane	<5.0		5.0		ug/L			09/27/16 12:34	1
2-Butanone (MEK)	<10		10		ug/L			09/27/16 12:34	1
Carbon disulfide	<2.0		2.0		ug/L			09/27/16 12:34	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/27/16 12:34	1
Chlorobenzene	<1.0		1.0		ug/L			09/27/16 12:34	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/27/16 12:34	1
Chloroethane	<5.0		5.0		ug/L			09/27/16 12:34	1
Chloroform	<1.0		1.0		ug/L			09/27/16 12:34	1
Chloromethane	<1.0 *		1.0		ug/L			09/27/16 12:34	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:34	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:34	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:34	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 12:34	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/27/16 12:34	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/27/16 12:34	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/27/16 12:34	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:34	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/27/16 12:34	1
Ethylbenzene	<1.0		1.0		ug/L			09/27/16 12:34	1
2-Hexanone	<10		10		ug/L			09/27/16 12:34	1
Methylene Chloride	<5.0 *		5.0		ug/L			09/27/16 12:34	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/27/16 12:34	1
Styrene	<1.0		1.0		ug/L			09/27/16 12:34	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/27/16 12:34	1
<b>Tetrachloroethene</b>	<b>11</b>		1.0		ug/L			09/27/16 12:34	1
Toluene	<1.0		1.0		ug/L			09/27/16 12:34	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 12:34	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 12:34	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:34	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/27/16 12:34	1
<b>Trichloroethene</b>	<b>5.3</b>		1.0		ug/L			09/27/16 12:34	1
Vinyl chloride	<1.0		1.0		ug/L			09/27/16 12:34	1
Xylenes, Total	<1.0		1.0		ug/L			09/27/16 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120			1
1,2-Dichloroethane-d4 (Surr)	94		73 - 131			1
Dibromofluoromethane (Surr)	101		80 - 122			1
4-Bromofluorobenzene (Surr)	100		80 - 120			1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: EB-1**

Date Collected: 09/20/16 13:35

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-20**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/27/16 11:27	1
Benzene	<1.0		1.0		ug/L			09/27/16 11:27	1
Bromoform	<1.0 *		1.0		ug/L			09/27/16 11:27	1
Bromomethane	<5.0		5.0		ug/L			09/27/16 11:27	1
2-Butanone (MEK)	<10		10		ug/L			09/27/16 11:27	1
Carbon disulfide	<2.0		2.0		ug/L			09/27/16 11:27	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/27/16 11:27	1
Chlorobenzene	<1.0		1.0		ug/L			09/27/16 11:27	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/27/16 11:27	1
Chloroethane	<5.0		5.0		ug/L			09/27/16 11:27	1
Chloroform	<1.0		1.0		ug/L			09/27/16 11:27	1
Chloromethane	<1.0 *		1.0		ug/L			09/27/16 11:27	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:27	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 11:27	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 11:27	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 11:27	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/27/16 11:27	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/27/16 11:27	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/27/16 11:27	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:27	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/27/16 11:27	1
Ethylbenzene	<1.0		1.0		ug/L			09/27/16 11:27	1
2-Hexanone	<10		10		ug/L			09/27/16 11:27	1
Methylene Chloride	<5.0 *		5.0		ug/L			09/27/16 11:27	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/27/16 11:27	1
Styrene	<1.0		1.0		ug/L			09/27/16 11:27	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/27/16 11:27	1
Tetrachloroethene	<1.0		1.0		ug/L			09/27/16 11:27	1
Toluene	<1.0		1.0		ug/L			09/27/16 11:27	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:27	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 11:27	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/27/16 11:27	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/27/16 11:27	1
Trichloroethene	<1.0		1.0		ug/L			09/27/16 11:27	1
Vinyl chloride	<1.0		1.0		ug/L			09/27/16 11:27	1
Xylenes, Total	<1.0		1.0		ug/L			09/27/16 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		09/27/16 11:27	1
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		09/27/16 11:27	1
Dibromofluoromethane (Surr)	100		80 - 122		09/27/16 11:27	1
4-Bromofluorobenzene (Surr)	101		80 - 120		09/27/16 11:27	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: IDW-1**

**Date Collected: 09/20/16 15:30**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-21**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1000		1000		ug/L			09/28/16 14:48	100
Benzene	<100		100		ug/L			09/28/16 14:48	100
Bromoform	<100		100		ug/L			09/28/16 14:48	100
Bromomethane	<500		500		ug/L			09/28/16 14:48	100
2-Butanone (MEK)	<1000		1000		ug/L			09/28/16 14:48	100
Carbon disulfide	<200		200		ug/L			09/28/16 14:48	100
Carbon tetrachloride	<100		100		ug/L			09/28/16 14:48	100
Chlorobenzene	<100		100		ug/L			09/28/16 14:48	100
Chlorodibromomethane	<100		100		ug/L			09/28/16 14:48	100
Chloroethane	<500		500		ug/L			09/28/16 14:48	100
Chloroform	<100		100		ug/L			09/28/16 14:48	100
Chloromethane	<100		100		ug/L			09/28/16 14:48	100
<b>cis-1,2-Dichloroethene</b>	<b>1700</b>		100		ug/L			09/28/16 14:48	100
cis-1,3-Dichloropropene	<100		100		ug/L			09/28/16 14:48	100
<b>1,2-Dichlorobenzene</b>	<b>300</b>		100		ug/L			09/28/16 14:48	100
1,4-Dichlorobenzene	<100		100		ug/L			09/28/16 14:48	100
Dichlorobromomethane	<100		100		ug/L			09/28/16 14:48	100
<b>1,1-Dichloroethane</b>	<b>250</b>		100		ug/L			09/28/16 14:48	100
1,2-Dichloroethane	<100		100		ug/L			09/28/16 14:48	100
<b>1,1-Dichloroethene</b>	<b>240</b>		100		ug/L			09/28/16 14:48	100
1,2-Dichloropropane	<100		100		ug/L			09/28/16 14:48	100
<b>Ethylbenzene</b>	<b>210</b>		100		ug/L			09/28/16 14:48	100
2-Hexanone	<1000		1000		ug/L			09/28/16 14:48	100
Methylene Chloride	<500		500		ug/L			09/28/16 14:48	100
4-Methyl-2-pentanone (MIBK)	<1000		1000		ug/L			09/28/16 14:48	100
Styrene	<100		100		ug/L			09/28/16 14:48	100
1,1,2,2-Tetrachloroethane	<100		100		ug/L			09/28/16 14:48	100
<b>Tetrachloroethene</b>	<b>1000</b>		100		ug/L			09/28/16 14:48	100
<b>Toluene</b>	<b>1100</b>		100		ug/L			09/28/16 14:48	100
trans-1,2-Dichloroethene	<100		100		ug/L			09/28/16 14:48	100
trans-1,3-Dichloropropene	<100		100		ug/L			09/28/16 14:48	100
<b>1,1,1-Trichloroethane</b>	<b>170</b>		100		ug/L			09/28/16 14:48	100
1,1,2-Trichloroethane	<100		100		ug/L			09/28/16 14:48	100
<b>Trichloroethene</b>	<b>400</b>		100		ug/L			09/28/16 14:48	100
<b>Vinyl chloride</b>	<b>400</b>		100		ug/L			09/28/16 14:48	100
<b>Xylenes, Total</b>	<b>740</b>		100		ug/L			09/28/16 14:48	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/28/16 14:48	100
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/28/16 14:48	100
Dibromofluoromethane (Surr)	98		80 - 122		09/28/16 14:48	100
4-Bromofluorobenzene (Surr)	109		80 - 120		09/28/16 14:48	100

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: DUP-1**

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-22**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<500		500		ug/L			09/28/16 15:09	50
Benzene	<50		50		ug/L			09/28/16 15:09	50
Bromoform	<50		50		ug/L			09/28/16 15:09	50
Bromomethane	<250		250		ug/L			09/28/16 15:09	50
2-Butanone (MEK)	<500		500		ug/L			09/28/16 15:09	50
Carbon disulfide	<100		100		ug/L			09/28/16 15:09	50
Carbon tetrachloride	<50		50		ug/L			09/28/16 15:09	50
Chlorobenzene	<50		50		ug/L			09/28/16 15:09	50
Chlorodibromomethane	<50		50		ug/L			09/28/16 15:09	50
Chloroethane	<250		250		ug/L			09/28/16 15:09	50
Chloroform	<50		50		ug/L			09/28/16 15:09	50
Chloromethane	<50		50		ug/L			09/28/16 15:09	50
<b>cis-1,2-Dichloroethene</b>	<b>340</b>		50		ug/L			09/28/16 15:09	50
cis-1,3-Dichloropropene	<50		50		ug/L			09/28/16 15:09	50
1,2-Dichlorobenzene	<50		50		ug/L			09/28/16 15:09	50
1,4-Dichlorobenzene	<50		50		ug/L			09/28/16 15:09	50
Dichlorobromomethane	<50		50		ug/L			09/28/16 15:09	50
1,1-Dichloroethane	<50		50		ug/L			09/28/16 15:09	50
1,2-Dichloroethane	<50		50		ug/L			09/28/16 15:09	50
<b>1,1-Dichloroethene</b>	<b>250</b>		50		ug/L			09/28/16 15:09	50
1,2-Dichloropropane	<50		50		ug/L			09/28/16 15:09	50
Ethylbenzene	<50		50		ug/L			09/28/16 15:09	50
2-Hexanone	<500		500		ug/L			09/28/16 15:09	50
Methylene Chloride	<250		250		ug/L			09/28/16 15:09	50
4-Methyl-2-pentanone (MIBK)	<500		500		ug/L			09/28/16 15:09	50
Styrene	<50		50		ug/L			09/28/16 15:09	50
1,1,2,2-Tetrachloroethane	<50		50		ug/L			09/28/16 15:09	50
<b>Tetrachloroethene</b>	<b>850</b>		50		ug/L			09/28/16 15:09	50
Toluene	<50		50		ug/L			09/28/16 15:09	50
trans-1,2-Dichloroethene	<50		50		ug/L			09/28/16 15:09	50
trans-1,3-Dichloropropene	<50		50		ug/L			09/28/16 15:09	50
1,1,1-Trichloroethane	<50		50		ug/L			09/28/16 15:09	50
1,1,2-Trichloroethane	<50		50		ug/L			09/28/16 15:09	50
<b>Trichloroethene</b>	<b>4500</b>		50		ug/L			09/28/16 15:09	50
Vinyl chloride	<50		50		ug/L			09/28/16 15:09	50
Xylenes, Total	<50		50		ug/L			09/28/16 15:09	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		09/28/16 15:09	50
1,2-Dichloroethane-d4 (Surr)	103		73 - 131		09/28/16 15:09	50
Dibromofluoromethane (Surr)	98		80 - 122		09/28/16 15:09	50
4-Bromofluorobenzene (Surr)	107		80 - 120		09/28/16 15:09	50

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: DUP-1**

**Date Collected: 09/20/16 00:00**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-22**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Acenaphthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Acenaphthylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Benzo[a]anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Benzo[a]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Benzo[b]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Benzo[k]fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Chrysene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Fluorene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Fluoranthene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Naphthalene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Phenanthrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Pyrene	<0.19		0.19		ug/L	09/23/16 13:09	09/25/16 20:51		1
Bis(2-ethylhexyl) phthalate	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:51		1
1,2,4-Trichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
<b>1,2-Dichlorobenzene</b>	<b>1.2</b>		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
1,3-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
1,4-Dichlorobenzene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
bis(chloroisopropyl) ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4,5-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4-Dichlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4-Dimethylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4-Dinitrophenol	<9.6		9.6		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,4-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2,6-Dinitrotoluene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2-Chloronaphthalene	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2-Chlorophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2-Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:51		1
2-Nitroaniline	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
2-Nitrophenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
3 & 4 Methylphenol	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:51		1
3,3'-Dichlorobenzidine	<19 *		19		ug/L	09/23/16 13:09	09/25/16 20:51		1
3-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:51		1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Bromophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Chloroaniline	<3.8		3.8		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Chlorophenyl phenyl ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Nitroaniline	<4.8		4.8		ug/L	09/23/16 13:09	09/25/16 20:51		1
4-Nitrophenol	<7.7		7.7		ug/L	09/23/16 13:09	09/25/16 20:51		1
Bis(2-chloroethoxy)methane	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
Bis(2-chloroethyl)ether	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
Butyl benzyl phthalate	<0.96		0.96		ug/L	09/23/16 13:09	09/25/16 20:51		1
Carbazole	<1.9		1.9		ug/L	09/23/16 13:09	09/25/16 20:51		1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: DUP-1**

**Date Collected: 09/20/16 00:00**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-22**

**Matrix: Water**

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Diethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Dimethyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Hexachlorobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Hexachlorobutadiene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Hexachlorocyclopentadiene	<1.9		1.9		ug/L		09/23/16 13:09	09/25/16 20:51	1
Hexachloroethane	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Isophorone	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Nitrobenzene	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Pentachlorophenol	<4.8		4.8		ug/L		09/23/16 13:09	09/25/16 20:51	1
Phenol	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Di-n-octyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
N-Nitrosodi-n-propylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
N-Nitrosodiphenylamine	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		09/23/16 13:09	09/25/16 20:51	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d5	61		20 - 113				09/23/16 13:09	09/25/16 20:51	1
Nitrobenzene-d5	69		37 - 103				09/23/16 13:09	09/25/16 20:51	1
Terphenyl-d14	65		22 - 121				09/23/16 13:09	09/25/16 20:51	1
2,4,6-Tribromophenol	73		39 - 133				09/23/16 13:09	09/25/16 20:51	1
2-Fluorophenol	63		18 - 112				09/23/16 13:09	09/25/16 20:51	1
2-Fluorobiphenyl	68		31 - 107				09/23/16 13:09	09/25/16 20:51	1

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TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: DUP-1**

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-22**

Matrix: Water

**Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	470		96		ug/L		09/23/16 13:09	09/26/16 19:31	50

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

**Client Sample ID: DUP-2**

**Date Collected: 09/20/16 00:00**

**Date Received: 09/22/16 09:18**

**Lab Sample ID: 680-130081-23**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<5000		5000		ug/L			09/28/16 15:29	500
Benzene	<500		500		ug/L			09/28/16 15:29	500
Bromoform	<500		500		ug/L			09/28/16 15:29	500
Bromomethane	<2500		2500		ug/L			09/28/16 15:29	500
2-Butanone (MEK)	<5000		5000		ug/L			09/28/16 15:29	500
Carbon disulfide	<1000		1000		ug/L			09/28/16 15:29	500
Carbon tetrachloride	<500		500		ug/L			09/28/16 15:29	500
Chlorobenzene	<500		500		ug/L			09/28/16 15:29	500
Chlorodibromomethane	<500		500		ug/L			09/28/16 15:29	500
Chloroethane	<2500		2500		ug/L			09/28/16 15:29	500
Chloroform	<500		500		ug/L			09/28/16 15:29	500
Chloromethane	<500		500		ug/L			09/28/16 15:29	500
cis-1,2-Dichloroethene	<500		500		ug/L			09/28/16 15:29	500
cis-1,3-Dichloropropene	<500		500		ug/L			09/28/16 15:29	500
1,2-Dichlorobenzene	<500		500		ug/L			09/28/16 15:29	500
1,4-Dichlorobenzene	<500		500		ug/L			09/28/16 15:29	500
Dichlorobromomethane	<500		500		ug/L			09/28/16 15:29	500
1,1-Dichloroethane	<500		500		ug/L			09/28/16 15:29	500
1,2-Dichloroethane	<500		500		ug/L			09/28/16 15:29	500
1,1-Dichloroethene	<500		500		ug/L			09/28/16 15:29	500
1,2-Dichloropropane	<500		500		ug/L			09/28/16 15:29	500
Ethylbenzene	<500		500		ug/L			09/28/16 15:29	500
2-Hexanone	<5000		5000		ug/L			09/28/16 15:29	500
Methylene Chloride	<2500		2500		ug/L			09/28/16 15:29	500
4-Methyl-2-pentanone (MIBK)	<5000		5000		ug/L			09/28/16 15:29	500
Styrene	<500		500		ug/L			09/28/16 15:29	500
1,1,2,2-Tetrachloroethane	<500		500		ug/L			09/28/16 15:29	500
<b>Tetrachloroethene</b>	<b>51000</b>		500		ug/L			09/28/16 15:29	500
Toluene	<500		500		ug/L			09/28/16 15:29	500
trans-1,2-Dichloroethene	<500		500		ug/L			09/28/16 15:29	500
trans-1,3-Dichloropropene	<500		500		ug/L			09/28/16 15:29	500
1,1,1-Trichloroethane	<500		500		ug/L			09/28/16 15:29	500
1,1,2-Trichloroethane	<500		500		ug/L			09/28/16 15:29	500
Trichloroethene	<500		500		ug/L			09/28/16 15:29	500
Vinyl chloride	<500		500		ug/L			09/28/16 15:29	500
Xylenes, Total	<500		500		ug/L			09/28/16 15:29	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120			500
1,2-Dichloroethane-d4 (Surr)	102		73 - 131			500
Dibromofluoromethane (Surr)	99		80 - 122			500
4-Bromofluorobenzene (Surr)	107		80 - 120			500

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Client Sample ID: Trip Blank

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-24

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 09:01	1
Benzene	<1.0		1.0		ug/L			09/28/16 09:01	1
Bromoform	<1.0		1.0		ug/L			09/28/16 09:01	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 09:01	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 09:01	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 09:01	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 09:01	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 09:01	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 09:01	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 09:01	1
Chloroform	<1.0		1.0		ug/L			09/28/16 09:01	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 09:01	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:01	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:01	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:01	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:01	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 09:01	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:01	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:01	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:01	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 09:01	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 09:01	1
2-Hexanone	<10		10		ug/L			09/28/16 09:01	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 09:01	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 09:01	1
Styrene	<1.0		1.0		ug/L			09/28/16 09:01	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 09:01	1
Tetrachloroethene	<1.0		1.0		ug/L			09/28/16 09:01	1
Toluene	<1.0		1.0		ug/L			09/28/16 09:01	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:01	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:01	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:01	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:01	1
Trichloroethene	<1.0		1.0		ug/L			09/28/16 09:01	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 09:01	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 09:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/28/16 09:01	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/28/16 09:01	1
Dibromofluoromethane (Surr)	96		80 - 122		09/28/16 09:01	1
4-Bromofluorobenzene (Surr)	105		80 - 120		09/28/16 09:01	1

TestAmerica Savannah

## Surrogate Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	12DCE (73-131)	DBFM (80-122)	BFB (80-120)
680-130081-1	MW-3	102	100	97	106
680-130081-2	MW-6R	99	100	96	106
680-130081-3	MW-7S	102	95	95	106
680-130081-4	MW-7M	99	106	101	104
680-130081-4 - DL	MW-7M	96	112	103	103
680-130081-5	MW-7D	102	99	96	105
680-130081-6	MW-7BR	100	101	97	103
680-130081-7	MW-11	102	101	96	106
680-130081-8	MW-12	101	93	101	100
680-130081-9	MW-12D	98	104	108	99
680-130081-10	MW-16	97	105	108	100
680-130081-11	MW-17D	94	107	110	99
680-130081-12	MW-19	96	110	112	99
680-130081-13	MW-22	93	116	116	98
680-130081-14	MW-22BR	93	119	117	99
680-130081-14 - DL	MW-22BR	99	107	101	106
680-130081-15	MW-27S	92	115	117	98
680-130081-16	MW-27D	95	106	110	99
680-130081-17	MW-29S	101	94	102	100
680-130081-18	MW-29D	92	117	117	99
680-130081-19	MW-30	101	94	101	100
680-130081-20	EB-1	103	92	100	101
680-130081-21	IDW-1	101	101	98	109
680-130081-22	DUP-1	99	103	98	107
680-130081-23	DUP-2	99	102	99	107
680-130081-24	Trip Blank	101	97	96	105
LCS 680-451021/3	Lab Control Sample	102	97	97	99
LCS 680-451182/3	Lab Control Sample	103	97	104	102
LCS 680-451349/3	Lab Control Sample	98	102	99	97
LCSD 680-451021/4	Lab Control Sample Dup	103	98	97	99
LCSD 680-451182/4	Lab Control Sample Dup	106	100	108	102
LCSD 680-451349/4	Lab Control Sample Dup	102	105	103	100
MB 680-451021/8	Method Blank	103	95	94	106
MB 680-451182/8	Method Blank	102	94	100	100
MB 680-451349/8	Method Blank	101	96	96	104

#### Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

### Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		PHL (20-113)	NBZ (37-103)	TPH (22-121)	TBP (39-133)	2FP (18-112)	FBP (31-107)
680-130081-2	MW-6R	42	41	39	46	14 X	38

TestAmerica Savannah

## Surrogate Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

### Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		PHL (20-113)	NBZ (37-103)	TPH (22-121)	TBP (39-133)	2FP (18-112)	FBP (31-107)
680-130081-2 MS	MW-6R	58	52	54	61	20	50
680-130081-2 MSD	MW-6R	39	36 X	32	42	14 X	35
680-130081-3	MW-7S	68	82	83	85	70	80
680-130081-5	MW-7D	67	73	64	80	69	71
680-130081-7	MW-11	72	80	83	85	73	78
680-130081-9	MW-12D	69	81	64	88	73	81
680-130081-22	DUP-1	61	69	65	73	63	68
LCS 680-450827/8-A	Lab Control Sample	74	80	84	90	76	79
MB 680-450827/7-A	Method Blank	79	83	85	81	77	77

#### Surrogate Legend

PHL = Phenol-d5

NBZ = Nitrobenzene-d5

TPH = Terphenyl-d14

TBP = 2,4,6-Tribromophenol

2FP = 2-Fluorophenol

FBP = 2-Fluorobiphenyl

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 680-451021/8

**Matrix:** Water

**Analysis Batch:** 451021

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10		10		ug/L			09/26/16 08:27	1
Benzene	<1.0		1.0		ug/L			09/26/16 08:27	1
Bromoform	<1.0		1.0		ug/L			09/26/16 08:27	1
Bromomethane	<5.0		5.0		ug/L			09/26/16 08:27	1
2-Butanone (MEK)	<10		10		ug/L			09/26/16 08:27	1
Carbon disulfide	<2.0		2.0		ug/L			09/26/16 08:27	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/26/16 08:27	1
Chlorobenzene	<1.0		1.0		ug/L			09/26/16 08:27	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/26/16 08:27	1
Chloroethane	<5.0		5.0		ug/L			09/26/16 08:27	1
Chloroform	<1.0		1.0		ug/L			09/26/16 08:27	1
Chloromethane	<1.0		1.0		ug/L			09/26/16 08:27	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/26/16 08:27	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/26/16 08:27	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/26/16 08:27	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/26/16 08:27	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/26/16 08:27	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/26/16 08:27	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/26/16 08:27	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/26/16 08:27	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/26/16 08:27	1
Ethylbenzene	<1.0		1.0		ug/L			09/26/16 08:27	1
2-Hexanone	<10		10		ug/L			09/26/16 08:27	1
Methylene Chloride	<5.0		5.0		ug/L			09/26/16 08:27	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/26/16 08:27	1
Styrene	<1.0		1.0		ug/L			09/26/16 08:27	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/26/16 08:27	1
Tetrachloroethene	<1.0		1.0		ug/L			09/26/16 08:27	1
Toluene	<1.0		1.0		ug/L			09/26/16 08:27	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/26/16 08:27	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/26/16 08:27	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/26/16 08:27	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/26/16 08:27	1
Trichloroethene	<1.0		1.0		ug/L			09/26/16 08:27	1
Vinyl chloride	<1.0		1.0		ug/L			09/26/16 08:27	1
Xylenes, Total	<1.0		1.0		ug/L			09/26/16 08:27	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	103		80 - 120		09/26/16 08:27	1
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		09/26/16 08:27	1
Dibromofluoromethane (Surr)	94		80 - 122		09/26/16 08:27	1
4-Bromofluorobenzene (Surr)	106		80 - 120		09/26/16 08:27	1

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 680-451021/3**

**Matrix: Water**

**Analysis Batch: 451021**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acetone	250	220		ug/L		88		68 - 132
Benzene	50.0	52.0		ug/L		104		80 - 120
Bromoform	50.0	48.8		ug/L		98		52 - 122
Bromomethane	50.0	46.0		ug/L		92		43 - 146
2-Butanone (MEK)	250	228		ug/L		91		79 - 125
Carbon disulfide	50.0	48.9		ug/L		98		77 - 129
Carbon tetrachloride	50.0	49.8		ug/L		100		67 - 125
Chlorobenzene	50.0	50.5		ug/L		101		80 - 120
Chlorodibromomethane	50.0	50.1		ug/L		100		68 - 120
Chloroethane	50.0	51.2		ug/L		102		48 - 145
Chloroform	50.0	52.4		ug/L		105		80 - 120
Chloromethane	50.0	52.7		ug/L		105		76 - 149
cis-1,2-Dichloroethene	50.0	51.4		ug/L		103		80 - 120
cis-1,3-Dichloropropene	50.0	51.0		ug/L		102		80 - 129
1,2-Dichlorobenzene	50.0	51.7		ug/L		103		80 - 120
1,4-Dichlorobenzene	50.0	51.3		ug/L		103		80 - 120
Dichlorobromomethane	50.0	51.6		ug/L		103		80 - 120
1,1-Dichloroethane	50.0	52.0		ug/L		104		80 - 120
1,2-Dichloroethane	50.0	52.3		ug/L		105		72 - 128
1,1-Dichloroethene	50.0	51.6		ug/L		103		80 - 120
1,2-Dichloropropane	50.0	51.5		ug/L		103		80 - 120
Ethylbenzene	50.0	53.5		ug/L		107		80 - 120
2-Hexanone	250	243		ug/L		97		80 - 131
Methylene Chloride	50.0	48.2		ug/L		96		80 - 120
4-Methyl-2-pentanone (MIBK)	250	250		ug/L		100		80 - 134
Styrene	50.0	51.2		ug/L		102		80 - 126
1,1,2,2-Tetrachloroethane	50.0	50.4		ug/L		101		76 - 126
Tetrachloroethene	50.0	53.6		ug/L		107		71 - 123
Toluene	50.0	51.5		ug/L		103		80 - 120
trans-1,2-Dichloroethene	50.0	50.5		ug/L		101		80 - 120
trans-1,3-Dichloropropene	50.0	49.1		ug/L		98		80 - 128
1,1,1-Trichloroethane	50.0	56.9		ug/L		114		80 - 120
1,1,2-Trichloroethane	50.0	49.4		ug/L		99		80 - 120
Trichloroethene	50.0	51.0		ug/L		102		80 - 120
Vinyl chloride	50.0	55.7		ug/L		111		80 - 129
Xylenes, Total	100	106		ug/L		106		80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Dibromofluoromethane (Surr)	97		80 - 122
4-Bromofluorobenzene (Surr)	99		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 680-451021/4**

**Matrix: Water**

**Analysis Batch: 451021**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Acetone	250	222		ug/L	89	68 - 132	1	30	
Benzene	50.0	52.0		ug/L	104	80 - 120	0	20	
Bromoform	50.0	49.6		ug/L	99	52 - 122	2	20	
Bromomethane	50.0	47.8		ug/L	96	43 - 146	4	20	
2-Butanone (MEK)	250	228		ug/L	91	79 - 125	0	20	
Carbon disulfide	50.0	49.8		ug/L	100	77 - 129	2	20	
Carbon tetrachloride	50.0	50.2		ug/L	100	67 - 125	1	20	
Chlorobenzene	50.0	51.0		ug/L	102	80 - 120	1	20	
Chlorodibromomethane	50.0	50.1		ug/L	100	68 - 120	0	20	
Chloroethane	50.0	52.0		ug/L	104	48 - 145	1	20	
Chloroform	50.0	52.9		ug/L	106	80 - 120	1	20	
Chloromethane	50.0	52.6		ug/L	105	76 - 149	0	30	
cis-1,2-Dichloroethene	50.0	51.5		ug/L	103	80 - 120	0	20	
cis-1,3-Dichloropropene	50.0	50.2		ug/L	100	80 - 129	2	20	
1,2-Dichlorobenzene	50.0	51.6		ug/L	103	80 - 120	0	20	
1,4-Dichlorobenzene	50.0	50.8		ug/L	102	80 - 120	1	20	
Dichlorobromomethane	50.0	51.7		ug/L	103	80 - 120	0	20	
1,1-Dichloroethane	50.0	52.9		ug/L	106	80 - 120	2	20	
1,2-Dichloroethane	50.0	52.5		ug/L	105	72 - 128	0	50	
1,1-Dichloroethene	50.0	53.2		ug/L	106	80 - 120	3	20	
1,2-Dichloropropane	50.0	51.2		ug/L	102	80 - 120	1	20	
Ethylbenzene	50.0	53.6		ug/L	107	80 - 120	0	20	
2-Hexanone	250	246		ug/L	99	80 - 131	1	20	
Methylene Chloride	50.0	49.2		ug/L	98	80 - 120	2	20	
4-Methyl-2-pentanone (MIBK)	250	251		ug/L	101	80 - 134	0	20	
Styrene	50.0	52.0		ug/L	104	80 - 126	2	20	
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L	101	76 - 126	0	20	
Tetrachloroethene	50.0	53.6		ug/L	107	71 - 123	0	20	
Toluene	50.0	51.7		ug/L	103	80 - 120	0	20	
trans-1,2-Dichloroethene	50.0	51.6		ug/L	103	80 - 120	2	20	
trans-1,3-Dichloropropene	50.0	49.2		ug/L	98	80 - 128	0	30	
1,1,1-Trichloroethane	50.0	56.5		ug/L	113	80 - 120	1	20	
1,1,2-Trichloroethane	50.0	49.4		ug/L	99	80 - 120	0	20	
Trichloroethene	50.0	51.5		ug/L	103	80 - 120	1	20	
Vinyl chloride	50.0	55.3		ug/L	111	80 - 129	1	20	
Xylenes, Total	100	106		ug/L	106	80 - 120	1	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		73 - 131
Dibromofluoromethane (Surr)	97		80 - 122
4-Bromofluorobenzene (Surr)	99		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 680-451182/8**

**Matrix: Water**

**Analysis Batch: 451182**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10		10		ug/L			09/27/16 11:04	1
Benzene	<1.0		1.0		ug/L			09/27/16 11:04	1
Bromoform	<1.0		1.0		ug/L			09/27/16 11:04	1
Bromomethane	<5.0		5.0		ug/L			09/27/16 11:04	1
2-Butanone (MEK)	<10		10		ug/L			09/27/16 11:04	1
Carbon disulfide	<2.0		2.0		ug/L			09/27/16 11:04	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/27/16 11:04	1
Chlorobenzene	<1.0		1.0		ug/L			09/27/16 11:04	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/27/16 11:04	1
Chloroethane	<5.0		5.0		ug/L			09/27/16 11:04	1
Chloroform	<1.0		1.0		ug/L			09/27/16 11:04	1
Chloromethane	<1.0		1.0		ug/L			09/27/16 11:04	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:04	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 11:04	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 11:04	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/27/16 11:04	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/27/16 11:04	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/27/16 11:04	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/27/16 11:04	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:04	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/27/16 11:04	1
Ethylbenzene	<1.0		1.0		ug/L			09/27/16 11:04	1
2-Hexanone	<10		10		ug/L			09/27/16 11:04	1
Methylene Chloride	<5.0		5.0		ug/L			09/27/16 11:04	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/27/16 11:04	1
Styrene	<1.0		1.0		ug/L			09/27/16 11:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/27/16 11:04	1
Tetrachloroethene	<1.0		1.0		ug/L			09/27/16 11:04	1
Toluene	<1.0		1.0		ug/L			09/27/16 11:04	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/27/16 11:04	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/27/16 11:04	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/27/16 11:04	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/27/16 11:04	1
Trichloroethene	<1.0		1.0		ug/L			09/27/16 11:04	1
Vinyl chloride	<1.0		1.0		ug/L			09/27/16 11:04	1
Xylenes, Total	<1.0		1.0		ug/L			09/27/16 11:04	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	102		80 - 120		09/27/16 11:04	1
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		09/27/16 11:04	1
Dibromofluoromethane (Surr)	100		80 - 122		09/27/16 11:04	1
4-Bromofluorobenzene (Surr)	100		80 - 120		09/27/16 11:04	1

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 680-451182/3**

**Matrix: Water**

**Analysis Batch: 451182**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acetone	250	229		ug/L	92	68 - 132		
Benzene	50.0	50.3		ug/L	101	80 - 120		
Bromoform	50.0	59.4		ug/L	119	52 - 122		
Bromomethane	50.0	35.7		ug/L	71	43 - 146		
2-Butanone (MEK)	250	248		ug/L	99	79 - 125		
Carbon disulfide	50.0	47.8		ug/L	96	77 - 129		
Carbon tetrachloride	50.0	51.8		ug/L	104	67 - 125		
Chlorobenzene	50.0	52.4		ug/L	105	80 - 120		
Chlorodibromomethane	50.0	55.4		ug/L	111	68 - 120		
Chloroethane	50.0	44.6		ug/L	89	48 - 145		
Chloroform	50.0	50.6		ug/L	101	80 - 120		
Chloromethane	50.0	35.4 *		ug/L	71	76 - 149		
cis-1,2-Dichloroethene	50.0	49.7		ug/L	99	80 - 120		
cis-1,3-Dichloropropene	50.0	51.6		ug/L	103	80 - 129		
1,2-Dichlorobenzene	50.0	52.6		ug/L	105	80 - 120		
1,4-Dichlorobenzene	50.0	52.6		ug/L	105	80 - 120		
Dichlorobromomethane	50.0	52.1		ug/L	104	80 - 120		
1,1-Dichloroethane	50.0	49.6		ug/L	99	80 - 120		
1,2-Dichloroethane	50.0	48.1		ug/L	96	72 - 128		
1,1-Dichloroethene	50.0	50.5		ug/L	101	80 - 120		
1,2-Dichloropropane	50.0	50.4		ug/L	101	80 - 120		
Ethylbenzene	50.0	51.7		ug/L	103	80 - 120		
2-Hexanone	250	227		ug/L	91	80 - 131		
Methylene Chloride	50.0	42.1		ug/L	84	80 - 120		
4-Methyl-2-pentanone (MIBK)	250	234		ug/L	94	80 - 134		
Styrene	50.0	53.6		ug/L	107	80 - 126		
1,1,2,2-Tetrachloroethane	50.0	52.1		ug/L	104	76 - 126		
Tetrachloroethene	50.0	52.7		ug/L	105	71 - 123		
Toluene	50.0	51.1		ug/L	102	80 - 120		
trans-1,2-Dichloroethene	50.0	51.5		ug/L	103	80 - 120		
trans-1,3-Dichloropropene	50.0	50.4		ug/L	101	80 - 128		
1,1,1-Trichloroethane	50.0	49.9		ug/L	100	80 - 120		
1,1,2-Trichloroethane	50.0	51.2		ug/L	102	80 - 120		
Trichloroethene	50.0	52.7		ug/L	105	80 - 120		
Vinyl chloride	50.0	43.3		ug/L	87	80 - 129		
Xylenes, Total	100	103		ug/L	103	80 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Dibromofluoromethane (Surr)	104		80 - 122
4-Bromofluorobenzene (Surr)	102		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 680-451182/4**

**Matrix: Water**

**Analysis Batch: 451182**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Acetone	250	248		ug/L	99	68 - 132	8	30	
Benzene	50.0	51.7		ug/L	103	80 - 120	3	20	
Bromoform	50.0	62.1 *		ug/L	124	52 - 122	5	20	
Bromomethane	50.0	37.9		ug/L	76	43 - 146	6	20	
2-Butanone (MEK)	250	259		ug/L	104	79 - 125	4	20	
Carbon disulfide	50.0	49.5		ug/L	99	77 - 129	4	20	
Carbon tetrachloride	50.0	52.5		ug/L	105	67 - 125	1	20	
Chlorobenzene	50.0	54.0		ug/L	108	80 - 120	3	20	
Chlorodibromomethane	50.0	57.9		ug/L	116	68 - 120	5	20	
Chloroethane	50.0	44.3		ug/L	89	48 - 145	1	20	
Chloroform	50.0	51.8		ug/L	104	80 - 120	2	20	
Chloromethane	50.0	38.5		ug/L	77	76 - 149	8	30	
cis-1,2-Dichloroethene	50.0	51.1		ug/L	102	80 - 120	3	20	
cis-1,3-Dichloropropene	50.0	53.3		ug/L	107	80 - 129	3	20	
1,2-Dichlorobenzene	50.0	53.2		ug/L	106	80 - 120	1	20	
1,4-Dichlorobenzene	50.0	53.1		ug/L	106	80 - 120	1	20	
Dichlorobromomethane	50.0	54.3		ug/L	109	80 - 120	4	20	
1,1-Dichloroethane	50.0	51.5		ug/L	103	80 - 120	4	20	
1,2-Dichloroethane	50.0	50.1		ug/L	100	72 - 128	4	50	
1,1-Dichloroethene	50.0	51.4		ug/L	103	80 - 120	2	20	
1,2-Dichloropropane	50.0	52.0		ug/L	104	80 - 120	3	20	
Ethylbenzene	50.0	53.5		ug/L	107	80 - 120	3	20	
2-Hexanone	250	241		ug/L	96	80 - 131	6	20	
Methylene Chloride	50.0	53.3 *		ug/L	107	80 - 120	23	20	
4-Methyl-2-pentanone (MIBK)	250	244		ug/L	98	80 - 134	4	20	
Styrene	50.0	55.6		ug/L	111	80 - 126	4	20	
1,1,2,2-Tetrachloroethane	50.0	54.5		ug/L	109	76 - 126	4	20	
Tetrachloroethene	50.0	54.8		ug/L	110	71 - 123	4	20	
Toluene	50.0	52.6		ug/L	105	80 - 120	3	20	
trans-1,2-Dichloroethene	50.0	52.4		ug/L	105	80 - 120	2	20	
trans-1,3-Dichloropropene	50.0	52.3		ug/L	105	80 - 128	4	30	
1,1,1-Trichloroethane	50.0	50.4		ug/L	101	80 - 120	1	20	
1,1,2-Trichloroethane	50.0	53.8		ug/L	108	80 - 120	5	20	
Trichloroethene	50.0	53.9		ug/L	108	80 - 120	2	20	
Vinyl chloride	50.0	44.3		ug/L	89	80 - 129	2	20	
Xylenes, Total	100	107		ug/L	107	80 - 120	4	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	106		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		73 - 131
Dibromofluoromethane (Surr)	108		80 - 122
4-Bromofluorobenzene (Surr)	102		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID:** MB 680-451349/8

**Matrix:** Water

**Analysis Batch:** 451349

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10		10		ug/L			09/28/16 08:41	1
Benzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Bromoform	<1.0		1.0		ug/L			09/28/16 08:41	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 08:41	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 08:41	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 08:41	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 08:41	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 08:41	1
Chloroform	<1.0		1.0		ug/L			09/28/16 08:41	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 08:41	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 08:41	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
2-Hexanone	<10		10		ug/L			09/28/16 08:41	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 08:41	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 08:41	1
Styrene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Tetrachloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
Toluene	<1.0		1.0		ug/L			09/28/16 08:41	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Trichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 08:41	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 08:41	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	101		80 - 120		09/28/16 08:41	1
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		09/28/16 08:41	1
Dibromofluoromethane (Surr)	96		80 - 122		09/28/16 08:41	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/28/16 08:41	1

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 680-451349/3**

**Matrix: Water**

**Analysis Batch: 451349**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acetone	250	238		ug/L	95	68 - 132		
Benzene	50.0	51.2		ug/L	102	80 - 120		
Bromoform	50.0	51.0		ug/L	102	52 - 122		
Bromomethane	50.0	47.0		ug/L	94	43 - 146		
2-Butanone (MEK)	250	247		ug/L	99	79 - 125		
Carbon disulfide	50.0	47.0		ug/L	94	77 - 129		
Carbon tetrachloride	50.0	47.3		ug/L	95	67 - 125		
Chlorobenzene	50.0	49.1		ug/L	98	80 - 120		
Chlorodibromomethane	50.0	52.3		ug/L	105	68 - 120		
Chloroethane	50.0	49.2		ug/L	98	48 - 145		
Chloroform	50.0	53.1		ug/L	106	80 - 120		
Chloromethane	50.0	51.5		ug/L	103	76 - 149		
cis-1,2-Dichloroethene	50.0	51.2		ug/L	102	80 - 120		
cis-1,3-Dichloropropene	50.0	51.0		ug/L	102	80 - 129		
1,2-Dichlorobenzene	50.0	50.4		ug/L	101	80 - 120		
1,4-Dichlorobenzene	50.0	49.3		ug/L	99	80 - 120		
Dichlorobromomethane	50.0	52.7		ug/L	105	80 - 120		
1,1-Dichloroethane	50.0	52.1		ug/L	104	80 - 120		
1,2-Dichloroethane	50.0	54.2		ug/L	108	72 - 128		
1,1-Dichloroethene	50.0	49.4		ug/L	99	80 - 120		
1,2-Dichloropropane	50.0	51.5		ug/L	103	80 - 120		
Ethylbenzene	50.0	50.1		ug/L	100	80 - 120		
2-Hexanone	250	254		ug/L	102	80 - 131		
Methylene Chloride	50.0	49.6		ug/L	99	80 - 120		
4-Methyl-2-pentanone (MIBK)	250	266		ug/L	106	80 - 134		
Styrene	50.0	49.2		ug/L	98	80 - 126		
1,1,2,2-Tetrachloroethane	50.0	50.8		ug/L	102	76 - 126		
Tetrachloroethene	50.0	50.5		ug/L	101	71 - 123		
Toluene	50.0	50.7		ug/L	101	80 - 120		
trans-1,2-Dichloroethene	50.0	49.3		ug/L	99	80 - 120		
trans-1,3-Dichloropropene	50.0	49.8		ug/L	100	80 - 128		
1,1,1-Trichloroethane	50.0	53.5		ug/L	107	80 - 120		
1,1,2-Trichloroethane	50.0	51.0		ug/L	102	80 - 120		
Trichloroethene	50.0	48.9		ug/L	98	80 - 120		
Vinyl chloride	50.0	50.5		ug/L	101	80 - 129		
Xylenes, Total	100	100		ug/L	100	80 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		73 - 131
Dibromofluoromethane (Surr)	99		80 - 122
4-Bromofluorobenzene (Surr)	97		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 680-451349/4**

**Matrix: Water**

**Analysis Batch: 451349**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Acetone	250	245		ug/L	98	68 - 132	3	30	
Benzene	50.0	54.1		ug/L	108	80 - 120	5	20	
Bromoform	50.0	53.2		ug/L	106	52 - 122	4	20	
Bromomethane	50.0	49.9		ug/L	100	43 - 146	6	20	
2-Butanone (MEK)	250	253		ug/L	101	79 - 125	2	20	
Carbon disulfide	50.0	50.5		ug/L	101	77 - 129	7	20	
Carbon tetrachloride	50.0	51.8		ug/L	104	67 - 125	9	20	
Chlorobenzene	50.0	51.0		ug/L	102	80 - 120	4	20	
Chlorodibromomethane	50.0	54.9		ug/L	110	68 - 120	5	20	
Chloroethane	50.0	53.1		ug/L	106	48 - 145	7	20	
Chloroform	50.0	55.1		ug/L	110	80 - 120	4	20	
Chloromethane	50.0	54.0		ug/L	108	76 - 149	5	30	
cis-1,2-Dichloroethene	50.0	53.5		ug/L	107	80 - 120	4	20	
cis-1,3-Dichloropropene	50.0	52.9		ug/L	106	80 - 129	4	20	
1,2-Dichlorobenzene	50.0	52.6		ug/L	105	80 - 120	4	20	
1,4-Dichlorobenzene	50.0	51.0		ug/L	102	80 - 120	3	20	
Dichlorobromomethane	50.0	55.1		ug/L	110	80 - 120	4	20	
1,1-Dichloroethane	50.0	54.6		ug/L	109	80 - 120	5	20	
1,2-Dichloroethane	50.0	56.9		ug/L	114	72 - 128	5	50	
1,1-Dichloroethene	50.0	53.6		ug/L	107	80 - 120	8	20	
1,2-Dichloropropane	50.0	53.7		ug/L	107	80 - 120	4	20	
Ethylbenzene	50.0	52.8		ug/L	106	80 - 120	5	20	
2-Hexanone	250	266		ug/L	107	80 - 131	5	20	
Methylene Chloride	50.0	52.3		ug/L	105	80 - 120	5	20	
4-Methyl-2-pentanone (MIBK)	250	276		ug/L	110	80 - 134	4	20	
Styrene	50.0	51.3		ug/L	103	80 - 126	4	20	
1,1,2,2-Tetrachloroethane	50.0	52.4		ug/L	105	76 - 126	3	20	
Tetrachloroethene	50.0	55.2		ug/L	110	71 - 123	9	20	
Toluene	50.0	53.6		ug/L	107	80 - 120	6	20	
trans-1,2-Dichloroethene	50.0	53.0		ug/L	106	80 - 120	7	20	
trans-1,3-Dichloropropene	50.0	52.3		ug/L	105	80 - 128	5	30	
1,1,1-Trichloroethane	50.0	58.4		ug/L	117	80 - 120	9	20	
1,1,2-Trichloroethane	50.0	53.6		ug/L	107	80 - 120	5	20	
Trichloroethene	50.0	52.5		ug/L	105	80 - 120	7	20	
Vinyl chloride	50.0	54.5		ug/L	109	80 - 129	8	20	
Xylenes, Total	100	106		ug/L	106	80 - 120	5	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		73 - 131
Dibromofluoromethane (Surr)	103		80 - 122
4-Bromofluorobenzene (Surr)	100		80 - 120

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

**Lab Sample ID: MB 680-450827/7-A**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Methylnaphthalene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Acenaphthene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Acenaphthylene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Anthracene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Benzo[a]anthracene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Benzo[a]pyrene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Benzo[b]fluoranthene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Benzo[k]fluoranthene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Chrysene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Fluorene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Fluoranthene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Naphthalene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Phenanthrene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Pyrene	<0.20		0.20		ug/L	09/23/16 13:09	09/25/16 18:14		1
Bis(2-ethylhexyl) phthalate	<5.0		5.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
1,2-Dichlorobenzene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
1,3-Dichlorobenzene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
1,4-Dichlorobenzene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
1,4-Dioxane	<2.0		2.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
bis(chloroisopropyl) ether	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4,5-Trichlorophenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4,6-Trichlorophenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4-Dichlorophenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4-Dimethylphenol	<2.0		2.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4-Dinitrophenol	<10		10		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,4-Dinitrotoluene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2,6-Dinitrotoluene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2-Chloronaphthalene	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2-Chlorophenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2-Methylphenol	<2.0		2.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2-Nitroaniline	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
2-Nitrophenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
3 & 4 Methylphenol	<2.0		2.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
3,3'-Dichlorobenzidine	<20		20		ug/L	09/23/16 13:09	09/25/16 18:14		1
3-Nitroaniline	<5.0		5.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4,6-Dinitro-2-methylphenol	<5.0		5.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Bromophenyl phenyl ether	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Chloro-3-methylphenol	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Chloroaniline	<4.0		4.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Chlorophenyl phenyl ether	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Nitroaniline	<5.0		5.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
4-Nitrophenol	<8.0		8.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
Bis(2-chloroethoxy)methane	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1
Bis(2-chloroethyl)ether	<1.0		1.0		ug/L	09/23/16 13:09	09/25/16 18:14		1

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: MB 680-450827/7-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 451016**

**Prep Batch: 450827**

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
Butyl benzyl phthalate	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Carbazole	<2.0		2.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Dibenzofuran	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Diethyl phthalate	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Dimethyl phthalate	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Hexachlorobenzene	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Hexachlorobutadiene	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Hexachlorocyclopentadiene	<2.0		2.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Hexachloroethane	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Isophorone	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Nitrobenzene	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Pentachlorophenol	<5.0		5.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Phenol	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Di-n-octyl phthalate	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
N-Nitrosodi-n-propylamine	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
N-Nitrosodiphenylamine	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	
Di-n-butyl phthalate	<1.0		1.0	ug/L		09/23/16 13:09	09/25/16 18:14		1	

**MB MB**

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
			Lower	Upper			
Phenol-d5	79		20	113	09/23/16 13:09	09/25/16 18:14	1
Nitrobenzene-d5	83		37	103	09/23/16 13:09	09/25/16 18:14	1
Terphenyl-d14	85		22	121	09/23/16 13:09	09/25/16 18:14	1
2,4,6-Tribromophenol	81		39	133	09/23/16 13:09	09/25/16 18:14	1
2-Fluorophenol	77		18	112	09/23/16 13:09	09/25/16 18:14	1
2-Fluorobiphenyl	77		31	107	09/23/16 13:09	09/25/16 18:14	1

**Lab Sample ID: LCS 680-450827/8-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 451016**

**Prep Batch: 450827**

Analyte	Spike Added	LCS			Unit	D	%Rec	%Rec.	
		Result	Qualifier	Limits				Lower	Upper
2-Methylnaphthalene	10.0	7.26		ug/L	73		33	33	130
Acenaphthene	10.0	7.67		ug/L	77		41	41	130
Acenaphthylene	10.0	8.01		ug/L	80		37	37	130
Anthracene	10.0	8.60		ug/L	86		48	48	130
Benzo[a]anthracene	10.0	8.22		ug/L	82		52	52	130
Benzo[a]pyrene	10.0	7.84		ug/L	78		44	44	130
Benzo[b]fluoranthene	10.0	7.91		ug/L	79		44	44	130
Benzo[g,h,i]perylene	10.0	7.81		ug/L	78		31	31	130
Benzo[k]fluoranthene	10.0	8.02		ug/L	80		39	39	131
Chrysene	10.0	7.92		ug/L	79		47	47	130
Dibenz(a,h)anthracene	10.0	7.93		ug/L	79		36	36	130
Fluorene	10.0	8.39		ug/L	84		43	43	130
Fluoranthene	10.0	8.86		ug/L	89		50	50	130
Indeno[1,2,3-cd]pyrene	10.0	7.63		ug/L	76		30	30	130
Naphthalene	10.0	7.41		ug/L	74		40	40	130
Phenanthrene	10.0	8.50		ug/L	85		49	49	130
Pyrene	10.0	8.46		ug/L	85		45	45	130

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: LCS 680-450827/8-A**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Bis(2-ethylhexyl) phthalate	10.0	7.85		ug/L	79	40 - 130		
1,2,4-Trichlorobenzene	10.0	6.47		ug/L	65	28 - 130		
1,2-Dichlorobenzene	10.0	6.17		ug/L	62	32 - 130		
1,3-Dichlorobenzene	10.0	5.95		ug/L	60	32 - 130		
1,4-Dichlorobenzene	10.0	6.04		ug/L	60	31 - 130		
1,4-Dioxane	10.0	6.31		ug/L	63	27 - 130		
bis(chloroisopropyl) ether	10.0	7.74		ug/L	77	24 - 130		
2,4,5-Trichlorophenol	10.0	9.14		ug/L	91	49 - 130		
2,4,6-Trichlorophenol	10.0	9.03		ug/L	90	48 - 130		
2,4-Dichlorophenol	10.0	8.65		ug/L	87	49 - 130		
2,4-Dimethylphenol	10.0	8.52		ug/L	85	37 - 130		
2,4-Dinitrophenol	20.0	17.7		ug/L	89	16 - 147		
2,4-Dinitrotoluene	10.0	9.38		ug/L	94	51 - 130		
2,6-Dinitrotoluene	10.0	8.97		ug/L	90	51 - 130		
2-Chloronaphthalene	10.0	7.49		ug/L	75	31 - 130		
2-Chlorophenol	10.0	7.90		ug/L	79	44 - 130		
2-Methylphenol	10.0	8.35		ug/L	83	42 - 130		
2-Nitroaniline	10.0	9.00		ug/L	90	46 - 130		
2-Nitrophenol	10.0	8.49		ug/L	85	50 - 130		
3 & 4 Methylphenol	10.0	8.22		ug/L	82	44 - 130		
3,3'-Dichlorobenzidine	10.0	<2.0 *		ug/L	7	10 - 142		
3-Nitroaniline	10.0	5.30		ug/L	53	14 - 130		
4,6-Dinitro-2-methylphenol	20.0	19.1		ug/L	95	18 - 147		
4-Bromophenyl phenyl ether	10.0	8.55		ug/L	86	41 - 130		
4-Chloro-3-methylphenol	10.0	9.00		ug/L	90	49 - 122		
4-Chloroaniline	10.0	2.12 J		ug/L	21	10 - 130		
4-Chlorophenyl phenyl ether	10.0	8.02		ug/L	80	39 - 130		
4-Nitroaniline	10.0	8.00		ug/L	80	38 - 130		
4-Nitrophenol	20.0	18.3		ug/L	91	25 - 135		
Bis(2-chloroethoxy)methane	10.0	8.31		ug/L	83	33 - 130		
Bis(2-chloroethyl)ether	10.0	8.11		ug/L	81	29 - 130		
Butyl benzyl phthalate	10.0	8.49		ug/L	85	42 - 130		
Carbazole	10.0	9.47		ug/L	95	48 - 130		
Dibenzofuran	10.0	8.10		ug/L	81	38 - 130		
Diethyl phthalate	10.0	8.79		ug/L	88	46 - 130		
Dimethyl phthalate	10.0	8.95		ug/L	89	48 - 130		
Hexachlorobenzene	10.0	8.22		ug/L	82	42 - 130		
Hexachlorobutadiene	10.0	5.65		ug/L	56	23 - 130		
Hexachlorocyclopentadiene	10.0	3.58		ug/L	36	10 - 130		
Hexachloroethane	10.0	5.69		ug/L	57	23 - 130		
Isophorone	10.0	8.70		ug/L	87	46 - 130		
Nitrobenzene	10.0	8.31		ug/L	83	41 - 130		
Pentachlorophenol	20.0	18.9		ug/L	95	27 - 134		
Phenol	10.0	7.15		ug/L	71	37 - 130		
Di-n-octyl phthalate	10.0	7.80		ug/L	78	43 - 130		
N-Nitrosodi-n-propylamine	10.0	8.75		ug/L	88	39 - 130		
N-Nitrosodiphenylamine	10.0	8.47		ug/L	85	27 - 130		
Di-n-butyl phthalate	10.0	9.08		ug/L	91	43 - 130		

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: LCS 680-450827/8-A**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
Phenol-d5	74		20 - 113
Nitrobenzene-d5	80		37 - 103
Terphenyl-d14	84		22 - 121
2,4,6-Tribromophenol	90		39 - 133
2-Fluorophenol	76		18 - 112
2-Fluorobiphenyl	79		31 - 107

**Lab Sample ID: 680-130081-2 MS**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: MW-6R**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
2-Methylnaphthalene	2.1	F2	9.84	7.34		ug/L		53	33 - 130
Acenaphthene	1.4	F2	9.84	7.10		ug/L		58	41 - 130
Acenaphthylene	<0.20		9.84	5.61		ug/L		56	37 - 130
Anthracene	0.31	F1 F2	9.84	6.19		ug/L		60	48 - 130
Benzo[a]anthracene	<0.20	F1 F2	9.84	6.08		ug/L		62	52 - 130
Benzo[a]pyrene	<0.20	F1 F2	9.84	5.71		ug/L		58	44 - 130
Benzo[b]fluoranthene	<0.20	F1 F2	9.84	6.02		ug/L		61	44 - 130
Benzo[g,h,i]perylene	<0.20	F2	9.84	5.82		ug/L		59	31 - 130
Benzo[k]fluoranthene	<0.20	F2	9.84	6.59		ug/L		67	39 - 131
Chrysene	<0.20	F1 F2	9.84	6.02		ug/L		61	47 - 130
Dibenz(a,h)anthracene	<0.20	F2	9.84	6.10		ug/L		62	36 - 130
Fluorene	0.69	F2	9.84	6.51		ug/L		59	43 - 130
Fluoranthene	<0.20	F1 F2	9.84	6.12		ug/L		61	50 - 130
Indeno[1,2,3-cd]pyrene	<0.20	F2	9.84	6.13		ug/L		62	30 - 130
Naphthalene	14	F1	9.84	19.6		ug/L		53	40 - 130
Phenanthrene	0.79	F1 F2	9.84	6.65		ug/L		60	49 - 130
Pyrene	<0.20	F2	9.84	6.19		ug/L		61	45 - 130
Bis(2-ethylhexyl) phthalate	<4.9		9.84	7.33		ug/L		74	40 - 130
1,2,4-Trichlorobenzene	130	E	9.84	148	E 4	ug/L		179	28 - 130
1,2-Dichlorobenzene	320	E F2	9.84	342	E 4	ug/L		221	32 - 130
1,3-Dichlorobenzene	20	E F1 F2	9.84	27.3	E	ug/L		74	32 - 130
1,4-Dichlorobenzene	97	E F2	9.84	111	E 4	ug/L		140	31 - 130
1,4-Dioxane	<2.0	F2	9.84	6.05		ug/L		53	27 - 130
bis(chloroisopropyl) ether	<0.98	F2	9.84	5.94		ug/L		60	24 - 130
2,4,5-Trichlorophenol	<0.98	F2	9.84	7.46		ug/L		71	49 - 130
2,4,6-Trichlorophenol	<0.98	F1 F2	9.84	6.43		ug/L		56	48 - 130
2,4-Dichlorophenol	<0.98	F1 F2	9.84	6.36		ug/L		61	49 - 130
2,4-Dimethylphenol	<2.0	F2	9.84	6.96		ug/L		63	37 - 130
2,4-Dinitrophenol	<9.8		19.7	<9.8		ug/L		43	16 - 147
2,4-Dinitrotoluene	<0.98	F1 F2	9.84	6.20		ug/L		63	51 - 130
2,6-Dinitrotoluene	<0.98	F2	9.84	6.56		ug/L		67	51 - 130
2-Chloronaphthalene	<0.98	F2	9.84	5.48		ug/L		56	31 - 130
2-Chlorophenol	<0.98	F2	9.84	6.57		ug/L		67	44 - 130
2-Methylphenol	4.2	F1 F2	9.84	10.4		ug/L		63	42 - 130
2-Nitroaniline	<0.98	F2	9.84	6.86		ug/L		70	46 - 130
2-Nitrophenol	<0.98	F1 F2	9.84	5.84		ug/L		59	50 - 130

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: 680-130081-2 MS**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: MW-6R**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
3 & 4 Methylphenol	4.7	F1 F2	9.84	11.1		ug/L		65	44 - 130
3,3'-Dichlorobenzidine	<20	* F1	9.84	<20	F1	ug/L		0	10 - 142
3-Nitroaniline	<4.9	F1 F2	9.84	<4.9	F1	ug/L		13	14 - 130
4,6-Dinitro-2-methylphenol	<4.9	F2	19.7	9.74		ug/L		49	18 - 147
4-Bromophenyl phenyl ether	<0.98	F2	9.84	5.35		ug/L		54	41 - 130
4-Chloro-3-methylphenol	<0.98	F2	9.84	6.37		ug/L		65	49 - 122
4-Chloroaniline	<3.9		9.84	7.10		ug/L		72	10 - 130
4-Chlorophenyl phenyl ether	<0.98	F2	9.84	5.25		ug/L		53	39 - 130
4-Nitroaniline	<4.9	F1	9.84	<4.9	F1	ug/L		21	38 - 130
4-Nitrophenol	<7.8	F2	19.7	15.2		ug/L		77	25 - 135
Bis(2-chloroethoxy)methane	<0.98		9.84	5.41		ug/L		55	33 - 130
Bis(2-chloroethyl)ether	<0.98		9.84	9.41		ug/L		96	29 - 130
Butyl benzyl phthalate	<0.98	F2	9.84	6.12		ug/L		62	42 - 130
Carbazole	<2.0		9.84	7.92		ug/L		73	48 - 130
Dibenzofuran	<0.98	F2	9.84	6.39		ug/L		58	38 - 130
Diethyl phthalate	<0.98	F2	9.84	7.21		ug/L		65	46 - 130
Dimethyl phthalate	<0.98	F2	9.84	6.32		ug/L		64	48 - 130
Hexachlorobenzene	<0.98	F2	9.84	5.26		ug/L		53	42 - 130
Hexachlorobutadiene	<0.98		9.84	3.38		ug/L		34	23 - 130
Hexachlorocyclopentadiene	<2.0	F1	9.84	<2.0	F1	ug/L		8	10 - 130
Hexachloroethane	<0.98	F2	9.84	8.23		ug/L		84	23 - 130
Isophorone	<0.98	F1 F2	9.84	5.70		ug/L		58	46 - 130
Nitrobenzene	<0.98	F2	9.84	6.05		ug/L		61	41 - 130
Pentachlorophenol	<4.9	F2	19.7	13.3		ug/L		68	27 - 134
Phenol	1.4		9.84	7.61		ug/L		63	37 - 130
Di-n-octyl phthalate	<0.98	F1 F2	9.84	5.85		ug/L		59	43 - 130
N-Nitrosodi-n-propylamine	<0.98	F2	9.84	7.02		ug/L		71	39 - 130
N-Nitrosodiphenylamine	<0.98		9.84	6.07		ug/L		62	27 - 130
Di-n-butyl phthalate	8.5	F1 F2	9.84	16.3		ug/L		79	43 - 130

**MS**

**MS**

Surrogate	%Recovery	Qualifier	Limits
Phenol-d5	58		20 - 113
Nitrobenzene-d5	52		37 - 103
Terphenyl-d14	54		22 - 121
2,4,6-Tribromophenol	61		39 - 133
2-Fluorophenol	20		18 - 112
2-Fluorobiphenyl	50		31 - 107

**Lab Sample ID: 680-130081-2 MSD**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: MW-6R**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
2-Methylnaphthalene	2.1	F2	9.26	5.27	F2	ug/L		34	33 - 130	33	30
Acenaphthene	1.4	F2	9.26	5.24	F2	ug/L		41	41 - 130	30	20
Acenaphthylene	<0.20		9.26	4.24		ug/L		45	37 - 130	28	30
Anthracene	0.31	F1 F2	9.26	4.47	F1 F2	ug/L		45	48 - 130	32	20
Benzo[a]anthracene	<0.20	F1 F2	9.26	4.00	F1 F2	ug/L		43	52 - 130	41	20

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: 680-130081-2 MSD**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: MW-6R**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzo[a]pyrene	<0.20	F1 F2	9.26	3.66	F1 F2	ug/L	40	44 - 130	44	30	
Benzo[b]fluoranthene	<0.20	F1 F2	9.26	3.81	F1 F2	ug/L	41	44 - 130	45	40	
Benzo[g,h,i]perylene	<0.20	F2	9.26	3.75	F2	ug/L	40	31 - 130	43	40	
Benzo[k]fluoranthene	<0.20	F2	9.26	4.38	F2	ug/L	47	39 - 131	40	30	
Chrysene	<0.20	F1 F2	9.26	4.07	F1 F2	ug/L	44	47 - 130	38	30	
Dibenz(a,h)anthracene	<0.20	F2	9.26	4.06	F2	ug/L	44	36 - 130	40	30	
Fluorene	0.69	F2	9.26	5.02	F2	ug/L	47	43 - 130	26	20	
Fluoranthene	<0.20	F1 F2	9.26	4.53	F1 F2	ug/L	47	50 - 130	30	20	
Indeno[1,2,3-cd]pyrene	<0.20	F2	9.26	3.91	F2	ug/L	42	30 - 130	44	30	
Naphthalene	14	F1	9.26	14.5	F1	ug/L	2	40 - 130	30	30	
Phenanthrene	0.79	F1 F2	9.26	4.99	F1 F2	ug/L	45	49 - 130	29	20	
Pyrene	<0.20	F2	9.26	4.40	F2	ug/L	46	45 - 130	34	20	
Bis(2-ethylhexyl) phthalate	<4.9		9.26	6.39		ug/L	69	40 - 130	14	30	
1,2,4-Trichlorobenzene	130	E	9.26	113	E 4	ug/L	-185	28 - 130	27	40	
1,2-Dichlorobenzene	320	E F2	9.26	241	E 4 F2	ug/L	-853	32 - 130	35	30	
1,3-Dichlorobenzene	20	E F1 F2	9.26	18.6	E F1 F2	ug/L	-15	32 - 130	38	30	
1,4-Dichlorobenzene	97	E F2	9.26	76.1	E 4 F2	ug/L	-225	31 - 130	37	30	
1,4-Dioxane	<2.0	F2	9.26	4.12	F2	ug/L	35	27 - 130	38	30	
bis(chloroisopropyl) ether	<0.98	F2	9.26	4.09	F2	ug/L	44	24 - 130	37	30	
2,4,5-Trichlorophenol	<0.98	F2	9.26	5.29	F2	ug/L	52	49 - 130	34	20	
2,4,6-Trichlorophenol	<0.98	F1 F2	9.26	4.60	F1 F2	ug/L	40	48 - 130	33	30	
2,4-Dichlorophenol	<0.98	F1 F2	9.26	4.64	F1 F2	ug/L	46	49 - 130	31	30	
2,4-Dimethylphenol	<2.0	F2	9.26	5.00	F2	ug/L	46	37 - 130	33	30	
2,4-Dinitrophenol	<9.8		18.5	<9.3		ug/L	30	16 - 147	41	50	
2,4-Dinitrotoluene	<0.98	F1 F2	9.26	4.43	F1 F2	ug/L	48	51 - 130	33	20	
2,6-Dinitrotoluene	<0.98	F2	9.26	4.73	F2	ug/L	51	51 - 130	32	20	
2-Chloronaphthalene	<0.98	F2	9.26	4.03	F2	ug/L	44	31 - 130	31	30	
2-Chlorophenol	<0.98	F2	9.26	4.48	F2	ug/L	48	44 - 130	38	30	
2-Methylphenol	4.2	F1 F2	9.26	7.20	F1 F2	ug/L	33	42 - 130	36	30	
2-Nitroaniline	<0.98	F2	9.26	4.94	F2	ug/L	53	46 - 130	32	20	
2-Nitrophenol	<0.98	F1 F2	9.26	4.11	F1 F2	ug/L	44	50 - 130	35	30	
3 & 4 Methylphenol	4.7	F1 F2	9.26	7.59	F1 F2	ug/L	32	44 - 130	37	30	
3,3'-Dichlorobenzidine	<20	* F1	9.26	<19	F1	ug/L	0	10 - 142	NC	50	
3-Nitroaniline	<4.9	F1 F2	9.26	<4.6	F1 F2	ug/L	2	14 - 130	145	50	
4,6-Dinitro-2-methylphenol	<4.9	F2	18.5	6.71	F2	ug/L	36	18 - 147	37	30	
4-Bromophenyl phenyl ether	<0.98	F2	9.26	4.27	F2	ug/L	46	41 - 130	23	20	
4-Chloro-3-methylphenol	<0.98	F2	9.26	4.66	F2	ug/L	50	49 - 122	31	30	
4-Chloroaniline	<3.9		9.26	5.19		ug/L	56	10 - 130	31	50	
4-Chlorophenyl phenyl ether	<0.98	F2	9.26	4.19	F2	ug/L	45	39 - 130	23	20	
4-Nitroaniline	<4.9	F1	9.26	<4.6	F1	ug/L	15	38 - 130	34	50	
4-Nitrophenol	<7.8	F2	18.5	10.9	F2	ug/L	59	25 - 135	33	30	
Bis(2-chloroethoxy)methane	<0.98		9.26	4.06		ug/L	44	33 - 130	29	50	
Bis(2-chloroethyl)ether	<0.98		9.26	6.60		ug/L	71	29 - 130	35	50	
Butyl benzyl phthalate	<0.98	F2	9.26	4.30	F2	ug/L	46	42 - 130	35	20	
Carbazole	<2.0		9.26	5.86		ug/L	56	48 - 130	30	50	
Dibenzofuran	<0.98	F2	9.26	4.72	F2	ug/L	43	38 - 130	30	20	
Diethyl phthalate	<0.98	F2	9.26	5.19	F2	ug/L	48	46 - 130	33	20	
Dimethyl phthalate	<0.98	F2	9.26	4.51	F2	ug/L	49	48 - 130	33	20	

TestAmerica Savannah

# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

**Lab Sample ID: 680-130081-2 MSD**

**Matrix: Water**

**Analysis Batch: 451016**

**Client Sample ID: MW-6R**

**Prep Type: Total/NA**

**Prep Batch: 450827**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Hexachlorobenzene	<0.98	F2	9.26	3.86	F2	ug/L	42	42 - 130	31	20	6
Hexachlorobutadiene	<0.98		9.26	2.71		ug/L	29	23 - 130	22	30	7
Hexachlorocyclopentadiene	<2.0	F1	9.26	<1.9	F1	ug/L	0	10 - 130	NC	50	8
Hexachloroethane	<0.98	F2	9.26	5.74	F2	ug/L	62	23 - 130	36	30	9
Isophorone	<0.98	F1 F2	9.26	4.12	F1 F2	ug/L	44	46 - 130	32	30	10
Nitrobenzene	<0.98	F2	9.26	4.29	F2	ug/L	46	41 - 130	34	30	11
Pentachlorophenol	<4.9	F2	18.5	9.00	F2	ug/L	49	27 - 134	39	20	12
Phenol	1.4		9.26	5.33		ug/L	42	37 - 130	35	40	13
Di-n-octyl phthalate	<0.98	F1 F2	9.26	3.58	F1 F2	ug/L	39	43 - 130	48	30	14
N-Nitrosodi-n-propylamine	<0.98	F2	9.26	5.01	F2	ug/L	54	39 - 130	33	30	15
N-Nitrosodiphenylamine	<0.98		9.26	4.34		ug/L	47	27 - 130	33	40	
Di-n-butyl phthalate	8.5	F1 F2	9.26	12.1	F1 F2	ug/L	38	43 - 130	30	20	

**MSD MSD**

<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
<i>Phenol-d5</i>	39		20 - 113
<i>Nitrobenzene-d5</i>	36	X	37 - 103
<i>Terphenyl-d14</i>	32		22 - 121
<i>2,4,6-Tribromophenol</i>	42		39 - 133
<i>2-Fluorophenol</i>	14	X	18 - 112
<i>2-Fluorobiphenyl</i>	35		31 - 107

TestAmerica Savannah

# QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## GC/MS VOA

### Analysis Batch: 451021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-1	MW-3	Total/NA	Water	8260B	1
680-130081-2	MW-6R	Total/NA	Water	8260B	2
680-130081-3	MW-7S	Total/NA	Water	8260B	3
680-130081-4	MW-7M	Total/NA	Water	8260B	4
680-130081-5	MW-7D	Total/NA	Water	8260B	5
680-130081-6	MW-7BR	Total/NA	Water	8260B	6
680-130081-7	MW-11	Total/NA	Water	8260B	7
MB 680-451021/8	Method Blank	Total/NA	Water	8260B	8
LCS 680-451021/3	Lab Control Sample	Total/NA	Water	8260B	9
LCSD 680-451021/4	Lab Control Sample Dup	Total/NA	Water	8260B	10

### Analysis Batch: 451182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-8	MW-12	Total/NA	Water	8260B	11
680-130081-9	MW-12D	Total/NA	Water	8260B	12
680-130081-10	MW-16	Total/NA	Water	8260B	13
680-130081-11	MW-17D	Total/NA	Water	8260B	14
680-130081-12	MW-19	Total/NA	Water	8260B	15
680-130081-13	MW-22	Total/NA	Water	8260B	
680-130081-14	MW-22BR	Total/NA	Water	8260B	
680-130081-15	MW-27S	Total/NA	Water	8260B	
680-130081-16	MW-27D	Total/NA	Water	8260B	
680-130081-17	MW-29S	Total/NA	Water	8260B	
680-130081-18	MW-29D	Total/NA	Water	8260B	
680-130081-19	MW-30	Total/NA	Water	8260B	
680-130081-20	EB-1	Total/NA	Water	8260B	
MB 680-451182/8	Method Blank	Total/NA	Water	8260B	
LCS 680-451182/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-451182/4	Lab Control Sample Dup	Total/NA	Water	8260B	

### Analysis Batch: 451349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-4 - DL	MW-7M	Total/NA	Water	8260B	
680-130081-14 - DL	MW-22BR	Total/NA	Water	8260B	
680-130081-21	IDW-1	Total/NA	Water	8260B	
680-130081-22	DUP-1	Total/NA	Water	8260B	
680-130081-23	DUP-2	Total/NA	Water	8260B	
680-130081-24	Trip Blank	Total/NA	Water	8260B	
MB 680-451349/8	Method Blank	Total/NA	Water	8260B	
LCS 680-451349/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-451349/4	Lab Control Sample Dup	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 450827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-2	MW-6R	Total/NA	Water	3520C	
680-130081-2 - DL	MW-6R	Total/NA	Water	3520C	
680-130081-3	MW-7S	Total/NA	Water	3520C	
680-130081-5	MW-7D	Total/NA	Water	3520C	

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# QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 450827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-5 - DL	MW-7D	Total/NA	Water	3520C	5
680-130081-7	MW-11	Total/NA	Water	3520C	6
680-130081-7 - DL	MW-11	Total/NA	Water	3520C	7
680-130081-9	MW-12D	Total/NA	Water	3520C	8
680-130081-9 - DL	MW-12D	Total/NA	Water	3520C	9
680-130081-22	DUP-1	Total/NA	Water	3520C	10
680-130081-22 - DL	DUP-1	Total/NA	Water	3520C	11
MB 680-450827/7-A	Method Blank	Total/NA	Water	3520C	12
LCS 680-450827/8-A	Lab Control Sample	Total/NA	Water	3520C	13
680-130081-2 MS	MW-6R	Total/NA	Water	3520C	14
680-130081-2 MSD	MW-6R	Total/NA	Water	3520C	15

### Analysis Batch: 451016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-2	MW-6R	Total/NA	Water	8270D LL	450827
680-130081-3	MW-7S	Total/NA	Water	8270D LL	450827
680-130081-5	MW-7D	Total/NA	Water	8270D LL	450827
680-130081-7	MW-11	Total/NA	Water	8270D LL	450827
680-130081-9	MW-12D	Total/NA	Water	8270D LL	450827
680-130081-22	DUP-1	Total/NA	Water	8270D LL	450827
MB 680-450827/7-A	Method Blank	Total/NA	Water	8270D LL	450827
LCS 680-450827/8-A	Lab Control Sample	Total/NA	Water	8270D LL	450827
680-130081-2 MS	MW-6R	Total/NA	Water	8270D LL	450827
680-130081-2 MSD	MW-6R	Total/NA	Water	8270D LL	450827

### Analysis Batch: 451128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-2 - DL	MW-6R	Total/NA	Water	8270D LL	450827
680-130081-5 - DL	MW-7D	Total/NA	Water	8270D LL	450827
680-130081-7 - DL	MW-11	Total/NA	Water	8270D LL	450827
680-130081-9 - DL	MW-12D	Total/NA	Water	8270D LL	450827
680-130081-22 - DL	DUP-1	Total/NA	Water	8270D LL	450827

## Lab Chronicle

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

**Client Sample ID: MW-3**

**Lab Sample ID: 680-130081-1**

Date Collected: 09/20/16 10:50

Matrix: Water

Date Received: 09/22/16 09:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	451021	09/26/16 12:53	JD1	TAL SAV

**Client Sample ID: MW-6R**

**Lab Sample ID: 680-130081-2**

Date Collected: 09/20/16 13:40

Matrix: Water

Date Received: 09/22/16 09:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	451021	09/26/16 13:13	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 18:59	DJK	TAL SAV
Total/NA	Prep	3520C	DL		450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	50	451128	09/26/16 17:54	DJK	TAL SAV

**Client Sample ID: MW-7S**

**Lab Sample ID: 680-130081-3**

Date Collected: 09/20/16 12:25

Matrix: Water

Date Received: 09/22/16 09:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451021	09/26/16 13:34	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 19:21	DJK	TAL SAV

**Client Sample ID: MW-7M**

**Lab Sample ID: 680-130081-4**

Date Collected: 09/20/16 12:00

Matrix: Water

Date Received: 09/22/16 09:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	451021	09/26/16 13:54	JD1	TAL SAV
Total/NA	Analysis	8260B	DL	50	451349	09/28/16 12:46	JD1	TAL SAV

**Client Sample ID: MW-7D**

**Lab Sample ID: 680-130081-5**

Date Collected: 09/20/16 11:25

Matrix: Water

Date Received: 09/22/16 09:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	451021	09/26/16 14:14	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 19:44	DJK	TAL SAV
Total/NA	Prep	3520C	DL		450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	5	451128	09/26/16 18:18	DJK	TAL SAV

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# Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

## Client Sample ID: MW-7BR

Date Collected: 09/20/16 15:20

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	451021	09/26/16 14:35	JD1	TAL SAV

## Client Sample ID: MW-11

Date Collected: 09/19/16 17:35

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	451021	09/26/16 14:55	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 20:06	DJK	TAL SAV
Total/NA	Prep	3520C	DL		450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	20	451128	09/26/16 18:42	DJK	TAL SAV

## Client Sample ID: MW-12

Date Collected: 09/20/16 09:20

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451182	09/27/16 12:12	JD1	TAL SAV

## Client Sample ID: MW-12D

Date Collected: 09/20/16 08:45

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	451182	09/27/16 13:42	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 20:29	DJK	TAL SAV
Total/NA	Prep	3520C	DL		450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	50	451128	09/26/16 19:06	DJK	TAL SAV

## Client Sample ID: MW-16

Date Collected: 09/20/16 13:05

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	451182	09/27/16 14:04	JD1	TAL SAV

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# Lab Chronicle

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-17D

Date Collected: 09/19/16 08:15

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	451182	09/27/16 14:27	JD1	TAL SAV

## Client Sample ID: MW-19

Date Collected: 09/20/16 10:15

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	451182	09/27/16 14:49	JD1	TAL SAV

## Client Sample ID: MW-22

Date Collected: 09/20/16 07:40

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	451182	09/27/16 15:12	JD1	TAL SAV

## Client Sample ID: MW-22BR

Date Collected: 09/20/16 07:18

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	451349	09/28/16 12:25	JD1	TAL SAV
Total/NA	Analysis	8260B		2	451182	09/27/16 15:34	JD1	TAL SAV

## Client Sample ID: MW-27S

Date Collected: 09/20/16 10:40

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	451182	09/27/16 15:57	JD1	TAL SAV

## Client Sample ID: MW-27D

Date Collected: 09/20/16 11:30

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	451182	09/27/16 16:19	JD1	TAL SAV

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# Lab Chronicle

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-1

Project/Site: Ashland Greensboro Monitoring Wells

## Client Sample ID: MW-29S

Date Collected: 09/20/16 13:00

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451182	09/27/16 12:57	JD1	TAL SAV

## Client Sample ID: MW-29D

Date Collected: 09/20/16 13:30

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	451182	09/27/16 16:42	JD1	TAL SAV

## Client Sample ID: MW-30

Date Collected: 09/20/16 14:20

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451182	09/27/16 12:34	JD1	TAL SAV

## Client Sample ID: EB-1

Date Collected: 09/20/16 13:35

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451182	09/27/16 11:27	JD1	TAL SAV

## Client Sample ID: IDW-1

Date Collected: 09/20/16 15:30

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	451349	09/28/16 14:48	JD1	TAL SAV

## Client Sample ID: DUP-1

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	451349	09/28/16 15:09	JD1	TAL SAV
Total/NA	Prep	3520C			450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	451016	09/25/16 20:51	DJK	TAL SAV
Total/NA	Prep	3520C	DL		450827	09/23/16 13:09	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	50	451128	09/26/16 19:31	DJK	TAL SAV

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## Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

### Client Sample ID: DUP-2

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

### Lab Sample ID: 680-130081-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	451349	09/28/16 15:29	JD1	TAL SAV

### Client Sample ID: Trip Blank

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

### Lab Sample ID: 680-130081-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 09:01	JD1	TAL SAV

#### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858





## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 680-130081-1

**Login Number: 130081**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Flanagan, Naomi V**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Certification Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Monitoring Wells

TestAmerica Job ID: 680-130081-1

### Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-16
Arkansas DEQ	State Program	6	88-0692	01-31-17
California	State Program	9	2939	07-31-16 *
Colorado	State Program	8	N/A	12-31-16
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-16
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-16
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-16
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-16
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-16 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-16
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-16
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-15-8	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-17
Washington	State Program	10	C805	06-10-17
West Virginia (DW)	State Program	3	9950C	12-31-16
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-130081-2

Client Project/Site: Ashland Greensboro Surface Water

For:

ARCADIS U.S., Inc.

801 Corporate Center Drive

Suite 300

Raleigh, North Carolina 27607-5073

Attn: Mr. Chris Kalinowski

Authorized for release by:

9/29/2016 2:32:08 PM

Jerry Lanier, Project Manager I

(912)354-7858 e.3410

[jerry.lanier@testamericainc.com](mailto:jerry.lanier@testamericainc.com)

### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Job ID: 680-130081-2**

**Laboratory: TestAmerica Savannah**

Narrative

### CASE NARRATIVE

**Client: ARCADIS U.S., Inc.**

**Project: Ashland Greensboro Surface Water**

**Report Number: 680-130081-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### **RECEIPT**

The samples were received on 09/22/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.7° C and 2.6° C.

#### **VOLATILE ORGANIC COMPOUNDS (GC-MS)**

Samples SW-3 (680-130081-25), SW-4 (680-130081-26), SW-5 (680-130081-27), SW-6 (680-130081-28), DUP-1 (680-130081-29) and Trip Blank (680-130081-30) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/28/2016.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-451349.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-130081-25	SW-3	Water	09/20/16 15:55	09/22/16 09:18
680-130081-26	SW-4	Water	09/20/16 16:05	09/22/16 09:18
680-130081-27	SW-5	Water	09/20/16 16:20	09/22/16 09:18
680-130081-28	SW-6	Water	09/20/16 16:30	09/22/16 09:18
680-130081-29	DUP-1	Water	09/20/16 00:00	09/22/16 09:18
680-130081-30	Trip Blank	Water	09/20/16 00:00	09/22/16 09:18

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## Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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## Definitions/Glossary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Detection Summary

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-2

Project/Site: Ashland Greensboro Surface Water

## Client Sample ID: SW-3

## Lab Sample ID: 680-130081-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.0		1.0		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.4		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	2.5		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	10		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	4.4		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-4

## Lab Sample ID: 680-130081-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.6		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	2.5		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	12		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	4.9		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-5

## Lab Sample ID: 680-130081-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.9		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	7.1		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	92		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	33		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: SW-6

## Lab Sample ID: 680-130081-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.5		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	11		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	37		1.0		ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	2.3		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	15		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: DUP-1

## Lab Sample ID: 680-130081-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.0		1.0		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	10		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	34		1.0		ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	2.2		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	15		1.0		ug/L	1		8260B	Total/NA

## Client Sample ID: Trip Blank

## Lab Sample ID: 680-130081-30

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Client Sample ID: SW-3**

Date Collected: 09/20/16 15:55

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-25**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 09:42	1
Benzene	<1.0		1.0		ug/L			09/28/16 09:42	1
Bromoform	<1.0		1.0		ug/L			09/28/16 09:42	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 09:42	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 09:42	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 09:42	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 09:42	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 09:42	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 09:42	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 09:42	1
<b>Chloroform</b>	<b>1.0</b>		1.0		ug/L			09/28/16 09:42	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 09:42	1
<b>cis-1,2-Dichloroethene</b>	<b>2.4</b>		1.0		ug/L			09/28/16 09:42	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:42	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:42	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:42	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 09:42	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:42	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:42	1
<b>1,1-Dichloroethene</b>	<b>2.5</b>		1.0		ug/L			09/28/16 09:42	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 09:42	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 09:42	1
2-Hexanone	<10		10		ug/L			09/28/16 09:42	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 09:42	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 09:42	1
Styrene	<1.0		1.0		ug/L			09/28/16 09:42	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 09:42	1
<b>Tetrachloroethene</b>	<b>10</b>		1.0		ug/L			09/28/16 09:42	1
Toluene	<1.0		1.0		ug/L			09/28/16 09:42	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:42	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:42	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:42	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:42	1
<b>Trichloroethene</b>	<b>4.4</b>		1.0		ug/L			09/28/16 09:42	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 09:42	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 09:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	102		80 - 120				09/28/16 09:42	1	
1,2-Dichloroethane-d4 (Surr)	96		73 - 131				09/28/16 09:42	1	
Dibromofluoromethane (Surr)	96		80 - 122				09/28/16 09:42	1	
4-Bromofluorobenzene (Surr)	106		80 - 120				09/28/16 09:42	1	

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Client Sample ID: SW-4**

Date Collected: 09/20/16 16:05

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-26**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 10:02	1
Benzene	<1.0		1.0		ug/L			09/28/16 10:02	1
Bromoform	<1.0		1.0		ug/L			09/28/16 10:02	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 10:02	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 10:02	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 10:02	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 10:02	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 10:02	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 10:02	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 10:02	1
Chloroform	<1.0		1.0		ug/L			09/28/16 10:02	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 10:02	1
<b>cis-1,2-Dichloroethene</b>	<b>2.6</b>		1.0		ug/L			09/28/16 10:02	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:02	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:02	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:02	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 10:02	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:02	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:02	1
<b>1,1-Dichloroethene</b>	<b>2.5</b>		1.0		ug/L			09/28/16 10:02	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 10:02	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 10:02	1
2-Hexanone	<10		10		ug/L			09/28/16 10:02	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 10:02	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 10:02	1
Styrene	<1.0		1.0		ug/L			09/28/16 10:02	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 10:02	1
<b>Tetrachloroethene</b>	<b>12</b>		1.0		ug/L			09/28/16 10:02	1
Toluene	<1.0		1.0		ug/L			09/28/16 10:02	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 10:02	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:02	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 10:02	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 10:02	1
<b>Trichloroethene</b>	<b>4.9</b>		1.0		ug/L			09/28/16 10:02	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 10:02	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 10:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		09/28/16 10:02	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/28/16 10:02	1
Dibromofluoromethane (Surr)	96		80 - 122		09/28/16 10:02	1
4-Bromofluorobenzene (Surr)	103		80 - 120		09/28/16 10:02	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Client Sample ID: SW-5**

Date Collected: 09/20/16 16:20

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-27**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 10:23	1
Benzene	<1.0		1.0		ug/L			09/28/16 10:23	1
Bromoform	<1.0		1.0		ug/L			09/28/16 10:23	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 10:23	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 10:23	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 10:23	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 10:23	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 10:23	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 10:23	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 10:23	1
Chloroform	<1.0		1.0		ug/L			09/28/16 10:23	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 10:23	1
<b>cis-1,2-Dichloroethene</b>	<b>7.9</b>		1.0		ug/L			09/28/16 10:23	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:23	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:23	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:23	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 10:23	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:23	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:23	1
<b>1,1-Dichloroethene</b>	<b>7.1</b>		1.0		ug/L			09/28/16 10:23	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 10:23	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 10:23	1
2-Hexanone	<10		10		ug/L			09/28/16 10:23	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 10:23	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 10:23	1
Styrene	<1.0		1.0		ug/L			09/28/16 10:23	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 10:23	1
<b>Tetrachloroethene</b>	<b>92</b>		1.0		ug/L			09/28/16 10:23	1
Toluene	<1.0		1.0		ug/L			09/28/16 10:23	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 10:23	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:23	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 10:23	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 10:23	1
<b>Trichloroethene</b>	<b>33</b>		1.0		ug/L			09/28/16 10:23	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 10:23	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 10:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		09/28/16 10:23	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/28/16 10:23	1
Dibromofluoromethane (Surr)	96		80 - 122		09/28/16 10:23	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/28/16 10:23	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Client Sample ID: SW-6**

Date Collected: 09/20/16 16:30

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-28**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 10:43	1
Benzene	<1.0		1.0		ug/L			09/28/16 10:43	1
Bromoform	<1.0		1.0		ug/L			09/28/16 10:43	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 10:43	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 10:43	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 10:43	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 10:43	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 10:43	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 10:43	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 10:43	1
Chloroform	<1.0		1.0		ug/L			09/28/16 10:43	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 10:43	1
<b>cis-1,2-Dichloroethene</b>	<b>5.5</b>		1.0		ug/L			09/28/16 10:43	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:43	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:43	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 10:43	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 10:43	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:43	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 10:43	1
<b>1,1-Dichloroethene</b>	<b>11</b>		1.0		ug/L			09/28/16 10:43	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 10:43	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 10:43	1
2-Hexanone	<10		10		ug/L			09/28/16 10:43	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 10:43	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 10:43	1
Styrene	<1.0		1.0		ug/L			09/28/16 10:43	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 10:43	1
<b>Tetrachloroethene</b>	<b>37</b>		1.0		ug/L			09/28/16 10:43	1
Toluene	<1.0		1.0		ug/L			09/28/16 10:43	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 10:43	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 10:43	1
<b>1,1,1-Trichloroethane</b>	<b>2.3</b>		1.0		ug/L			09/28/16 10:43	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 10:43	1
<b>Trichloroethene</b>	<b>15</b>		1.0		ug/L			09/28/16 10:43	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 10:43	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 10:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/28/16 10:43	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/28/16 10:43	1
Dibromofluoromethane (Surr)	95		80 - 122		09/28/16 10:43	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/28/16 10:43	1

TestAmerica Savannah

# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

**Client Sample ID: DUP-1**

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

**Lab Sample ID: 680-130081-29**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 11:04	1
Benzene	<1.0		1.0		ug/L			09/28/16 11:04	1
Bromoform	<1.0		1.0		ug/L			09/28/16 11:04	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 11:04	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 11:04	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 11:04	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 11:04	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 11:04	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 11:04	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 11:04	1
Chloroform	<1.0		1.0		ug/L			09/28/16 11:04	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 11:04	1
<b>cis-1,2-Dichloroethene</b>	<b>5.0</b>		1.0		ug/L			09/28/16 11:04	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 11:04	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 11:04	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 11:04	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 11:04	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 11:04	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 11:04	1
<b>1,1-Dichloroethene</b>	<b>10</b>		1.0		ug/L			09/28/16 11:04	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 11:04	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 11:04	1
2-Hexanone	<10		10		ug/L			09/28/16 11:04	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 11:04	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 11:04	1
Styrene	<1.0		1.0		ug/L			09/28/16 11:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 11:04	1
<b>Tetrachloroethene</b>	<b>34</b>		1.0		ug/L			09/28/16 11:04	1
Toluene	<1.0		1.0		ug/L			09/28/16 11:04	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 11:04	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 11:04	1
<b>1,1,1-Trichloroethane</b>	<b>2.2</b>		1.0		ug/L			09/28/16 11:04	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 11:04	1
<b>Trichloroethene</b>	<b>15</b>		1.0		ug/L			09/28/16 11:04	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 11:04	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		09/28/16 11:04	1
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		09/28/16 11:04	1
Dibromofluoromethane (Surr)	95		80 - 122		09/28/16 11:04	1
4-Bromofluorobenzene (Surr)	105		80 - 120		09/28/16 11:04	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## Client Sample ID: Trip Blank

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

## Lab Sample ID: 680-130081-30

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10		10		ug/L			09/28/16 09:21	1
Benzene	<1.0		1.0		ug/L			09/28/16 09:21	1
Bromoform	<1.0		1.0		ug/L			09/28/16 09:21	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 09:21	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 09:21	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 09:21	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 09:21	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 09:21	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 09:21	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 09:21	1
Chloroform	<1.0		1.0		ug/L			09/28/16 09:21	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 09:21	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:21	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:21	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:21	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 09:21	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 09:21	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:21	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 09:21	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:21	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 09:21	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 09:21	1
2-Hexanone	<10		10		ug/L			09/28/16 09:21	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 09:21	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 09:21	1
Styrene	<1.0		1.0		ug/L			09/28/16 09:21	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 09:21	1
Tetrachloroethene	<1.0		1.0		ug/L			09/28/16 09:21	1
Toluene	<1.0		1.0		ug/L			09/28/16 09:21	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 09:21	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 09:21	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:21	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 09:21	1
Trichloroethene	<1.0		1.0		ug/L			09/28/16 09:21	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 09:21	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 09:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		09/28/16 09:21	1
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		09/28/16 09:21	1
Dibromofluoromethane (Surr)	97		80 - 122		09/28/16 09:21	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/28/16 09:21	1

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# Surrogate Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	12DCE (73-131)	DBFM (80-122)	BFB (80-120)
680-130081-25	SW-3	102	96	96	106
680-130081-26	SW-4	102	97	96	103
680-130081-27	SW-5	100	97	96	104
680-130081-28	SW-6	101	97	95	104
680-130081-29	DUP-1	102	96	95	105
680-130081-30	Trip Blank	101	96	97	104
LCS 680-451349/3	Lab Control Sample	98	102	99	97
LCSD 680-451349/4	Lab Control Sample Dup	102	105	103	100
MB 680-451349/8	Method Blank	101	96	96	104

### Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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# QC Sample Results

Client: ARCADIS U.S., Inc.

TestAmerica Job ID: 680-130081-2

Project/Site: Ashland Greensboro Surface Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 680-451349/8

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 451349

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10		10		ug/L			09/28/16 08:41	1
Benzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Bromoform	<1.0		1.0		ug/L			09/28/16 08:41	1
Bromomethane	<5.0		5.0		ug/L			09/28/16 08:41	1
2-Butanone (MEK)	<10		10		ug/L			09/28/16 08:41	1
Carbon disulfide	<2.0		2.0		ug/L			09/28/16 08:41	1
Carbon tetrachloride	<1.0		1.0		ug/L			09/28/16 08:41	1
Chlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Chlorodibromomethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Chloroethane	<5.0		5.0		ug/L			09/28/16 08:41	1
Chloroform	<1.0		1.0		ug/L			09/28/16 08:41	1
Chloromethane	<1.0		1.0		ug/L			09/28/16 08:41	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
Dichlorobromomethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1-Dichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,2-Dichloropropane	<1.0		1.0		ug/L			09/28/16 08:41	1
Ethylbenzene	<1.0		1.0		ug/L			09/28/16 08:41	1
2-Hexanone	<10		10		ug/L			09/28/16 08:41	1
Methylene Chloride	<5.0		5.0		ug/L			09/28/16 08:41	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			09/28/16 08:41	1
Styrene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Tetrachloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
Toluene	<1.0		1.0		ug/L			09/28/16 08:41	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,1-Trichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			09/28/16 08:41	1
Trichloroethene	<1.0		1.0		ug/L			09/28/16 08:41	1
Vinyl chloride	<1.0		1.0		ug/L			09/28/16 08:41	1
Xylenes, Total	<1.0		1.0		ug/L			09/28/16 08:41	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	101		80 - 120		09/28/16 08:41	1
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		09/28/16 08:41	1
Dibromofluoromethane (Surr)	96		80 - 122		09/28/16 08:41	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/28/16 08:41	1

# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 680-451349/3**

**Matrix: Water**

**Analysis Batch: 451349**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acetone	250	238		ug/L	95	68 - 132		
Benzene	50.0	51.2		ug/L	102	80 - 120		
Bromoform	50.0	51.0		ug/L	102	52 - 122		
Bromomethane	50.0	47.0		ug/L	94	43 - 146		
2-Butanone (MEK)	250	247		ug/L	99	79 - 125		
Carbon disulfide	50.0	47.0		ug/L	94	77 - 129		
Carbon tetrachloride	50.0	47.3		ug/L	95	67 - 125		
Chlorobenzene	50.0	49.1		ug/L	98	80 - 120		
Chlorodibromomethane	50.0	52.3		ug/L	105	68 - 120		
Chloroethane	50.0	49.2		ug/L	98	48 - 145		
Chloroform	50.0	53.1		ug/L	106	80 - 120		
Chloromethane	50.0	51.5		ug/L	103	76 - 149		
cis-1,2-Dichloroethene	50.0	51.2		ug/L	102	80 - 120		
cis-1,3-Dichloropropene	50.0	51.0		ug/L	102	80 - 129		
1,2-Dichlorobenzene	50.0	50.4		ug/L	101	80 - 120		
1,4-Dichlorobenzene	50.0	49.3		ug/L	99	80 - 120		
Dichlorobromomethane	50.0	52.7		ug/L	105	80 - 120		
1,1-Dichloroethane	50.0	52.1		ug/L	104	80 - 120		
1,2-Dichloroethane	50.0	54.2		ug/L	108	72 - 128		
1,1-Dichloroethene	50.0	49.4		ug/L	99	80 - 120		
1,2-Dichloropropane	50.0	51.5		ug/L	103	80 - 120		
Ethylbenzene	50.0	50.1		ug/L	100	80 - 120		
2-Hexanone	250	254		ug/L	102	80 - 131		
Methylene Chloride	50.0	49.6		ug/L	99	80 - 120		
4-Methyl-2-pentanone (MIBK)	250	266		ug/L	106	80 - 134		
Styrene	50.0	49.2		ug/L	98	80 - 126		
1,1,2,2-Tetrachloroethane	50.0	50.8		ug/L	102	76 - 126		
Tetrachloroethene	50.0	50.5		ug/L	101	71 - 123		
Toluene	50.0	50.7		ug/L	101	80 - 120		
trans-1,2-Dichloroethene	50.0	49.3		ug/L	99	80 - 120		
trans-1,3-Dichloropropene	50.0	49.8		ug/L	100	80 - 128		
1,1,1-Trichloroethane	50.0	53.5		ug/L	107	80 - 120		
1,1,2-Trichloroethane	50.0	51.0		ug/L	102	80 - 120		
Trichloroethene	50.0	48.9		ug/L	98	80 - 120		
Vinyl chloride	50.0	50.5		ug/L	101	80 - 129		
Xylenes, Total	100	100		ug/L	100	80 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		73 - 131
Dibromofluoromethane (Surr)	99		80 - 122
4-Bromofluorobenzene (Surr)	97		80 - 120

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# QC Sample Results

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 680-451349/4**

**Matrix: Water**

**Analysis Batch: 451349**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Acetone	250	245		ug/L	98	68 - 132	3	30	
Benzene	50.0	54.1		ug/L	108	80 - 120	5	20	
Bromoform	50.0	53.2		ug/L	106	52 - 122	4	20	
Bromomethane	50.0	49.9		ug/L	100	43 - 146	6	20	
2-Butanone (MEK)	250	253		ug/L	101	79 - 125	2	20	
Carbon disulfide	50.0	50.5		ug/L	101	77 - 129	7	20	
Carbon tetrachloride	50.0	51.8		ug/L	104	67 - 125	9	20	
Chlorobenzene	50.0	51.0		ug/L	102	80 - 120	4	20	
Chlorodibromomethane	50.0	54.9		ug/L	110	68 - 120	5	20	
Chloroethane	50.0	53.1		ug/L	106	48 - 145	7	20	
Chloroform	50.0	55.1		ug/L	110	80 - 120	4	20	
Chloromethane	50.0	54.0		ug/L	108	76 - 149	5	30	
cis-1,2-Dichloroethene	50.0	53.5		ug/L	107	80 - 120	4	20	
cis-1,3-Dichloropropene	50.0	52.9		ug/L	106	80 - 129	4	20	
1,2-Dichlorobenzene	50.0	52.6		ug/L	105	80 - 120	4	20	
1,4-Dichlorobenzene	50.0	51.0		ug/L	102	80 - 120	3	20	
Dichlorobromomethane	50.0	55.1		ug/L	110	80 - 120	4	20	
1,1-Dichloroethane	50.0	54.6		ug/L	109	80 - 120	5	20	
1,2-Dichloroethane	50.0	56.9		ug/L	114	72 - 128	5	50	
1,1-Dichloroethene	50.0	53.6		ug/L	107	80 - 120	8	20	
1,2-Dichloropropane	50.0	53.7		ug/L	107	80 - 120	4	20	
Ethylbenzene	50.0	52.8		ug/L	106	80 - 120	5	20	
2-Hexanone	250	266		ug/L	107	80 - 131	5	20	
Methylene Chloride	50.0	52.3		ug/L	105	80 - 120	5	20	
4-Methyl-2-pentanone (MIBK)	250	276		ug/L	110	80 - 134	4	20	
Styrene	50.0	51.3		ug/L	103	80 - 126	4	20	
1,1,2,2-Tetrachloroethane	50.0	52.4		ug/L	105	76 - 126	3	20	
Tetrachloroethene	50.0	55.2		ug/L	110	71 - 123	9	20	
Toluene	50.0	53.6		ug/L	107	80 - 120	6	20	
trans-1,2-Dichloroethene	50.0	53.0		ug/L	106	80 - 120	7	20	
trans-1,3-Dichloropropene	50.0	52.3		ug/L	105	80 - 128	5	30	
1,1,1-Trichloroethane	50.0	58.4		ug/L	117	80 - 120	9	20	
1,1,2-Trichloroethane	50.0	53.6		ug/L	107	80 - 120	5	20	
Trichloroethene	50.0	52.5		ug/L	105	80 - 120	7	20	
Vinyl chloride	50.0	54.5		ug/L	109	80 - 129	8	20	
Xylenes, Total	100	106		ug/L	106	80 - 120	5	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		73 - 131
Dibromofluoromethane (Surr)	103		80 - 122
4-Bromofluorobenzene (Surr)	100		80 - 120

TestAmerica Savannah

# QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## GC/MS VOA

Analysis Batch: 451349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130081-25	SW-3	Total/NA	Water	8260B	5
680-130081-26	SW-4	Total/NA	Water	8260B	6
680-130081-27	SW-5	Total/NA	Water	8260B	7
680-130081-28	SW-6	Total/NA	Water	8260B	8
680-130081-29	DUP-1	Total/NA	Water	8260B	9
680-130081-30	Trip Blank	Total/NA	Water	8260B	10
MB 680-451349/8	Method Blank	Total/NA	Water	8260B	11
LCS 680-451349/3	Lab Control Sample	Total/NA	Water	8260B	12
LCSD 680-451349/4	Lab Control Sample Dup	Total/NA	Water	8260B	13

# Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

## Client Sample ID: SW-3

Date Collected: 09/20/16 15:55

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 09:42	JD1	TAL SAV

## Client Sample ID: SW-4

Date Collected: 09/20/16 16:05

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 10:02	JD1	TAL SAV

## Client Sample ID: SW-5

Date Collected: 09/20/16 16:20

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 10:23	JD1	TAL SAV

## Client Sample ID: SW-6

Date Collected: 09/20/16 16:30

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 10:43	JD1	TAL SAV

## Client Sample ID: DUP-1

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 11:04	JD1	TAL SAV

## Client Sample ID: Trip Blank

Date Collected: 09/20/16 00:00

Date Received: 09/22/16 09:18

Lab Sample ID: 680-130081-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	451349	09/28/16 09:21	JD1	TAL SAV

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

TestAmerica

**THE LEADER IN ENVIRONMENTAL TESTING**  
**TestAmerica Savannah**

Report To:	Bill To:
Contact:	Ryan Gerber
Company:	Arcadis
Address:	801 Corporate Center Dr., Ste 300 Raleigh, NC 27607
Phone:	919-854-1282
Fax:	919-854-8445
Email:	<a href="mailto:Ryan.Gerber@arcadis-us.com">Ryan.Gerber@arcadis-us.com</a>
Contact:	
Company:	
Address:	
Phone:	
Fax:	
	PO #:

Shaded Areas For Internal Use Only											
Report To:	Bill To:			Shaded Areas For Internal Use Only							
Contact:	Ryan Gerber	Contact:	Mike Deyer	Lab Lot #							
Company:	Arcadis	Company:	Ashland Inc.	Samples Sealed							
Address:	801 Corporate Center Dr., Ste 300	Address:	5200 Blazer Pkwy, EH&S DS-4	Package Sealed							
Raleigh, NC 27607	Dublin, OH 43017	Yes			No						
Phone:	919-854-1282	Phone:	614-790-1586	Received on Ice							
Fax:	919-854-8445	Fax:		Yes							
Email:	ryan.gerber@arcadis-us.com	PO #:	Quote:	Temperature °C of Cooler							
Sampler Name:	<u>MATTHEW ECKMAIR</u>	Signature:	<u>Matthew Eckmair</u>	Ref#:	# / Conf:	Volume:	Preserv:	VOCs (8260B)	Comp/Grab	Matrx	Within Hold Time
Project Name:	OH009000.NC10.16400	Date Required	Hard Copy: / /								Yes
Project Location:	<u>Ashland Greensboro</u>	Fax:	/ /								No
Lab PW:	Jerry Lanier										Present: Indicated
Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Time							Yes
SW-3			9/20/14	1535	w	g	1				No
SW-4				1605	w	g	1				No
SW-5				1620	w	g	1				No
SW-6				1630	w	g	1				No
DUP-1				—	w	g	1				No
Trip Blank				—	w	g	1				No
RELINQUISHED BY:	ANTEA GROUP			DATE: 9/21/14	TIME: 0950	RELINQUISHED BY:	ANTEA GROUP			COMPANY: <u>Matthew Eckmair</u>	TIME: 1310
RELINQUISHED BY:	Matthew Eckmair			DATE: 9/21/14	TIME: 1500	RELINQUISHED BY:	Matthew Eckmair			COMPANY: <u>Matthew Eckmair</u>	TIME: 0950
Container Key	Preservative Key										
WW = Wastewater	1. HCl, Cool to 4°										
SE = Sediment	2. H <sub>2</sub> SO <sub>4</sub> , Cool to 4°										
SO = Solid	3. HNO <sub>3</sub> , Cool to 4°										
DL = Drum Liquid	4. NaOH, Cool to 4°										
DS = Drum Solid	5. NaOH/HCl, Cool to 4°										
L = Leachate	6. Cool to 4°										
W = Wipe	7. None										
O =											
Comments: Total of 5 VOC bottle sets plus trip blank.											
Please deliver Bottles to: <b>Antea Group</b> Attn: Matthew Eckmair 3530 Toringdon Way, STE 106 Charlotte, NC 28277											
Date Received:	DATE: 9-22-14										
Carrier:	TIME: 0950										
Handled By:	DATE: 9-22-14										
Bill of Lading:	TIME: 0950										
1 of 2											

## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 680-130081-2

**Login Number: 130081**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Flanagan, Naomi V**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Certification Summary

Client: ARCADIS U.S., Inc.

Project/Site: Ashland Greensboro Surface Water

TestAmerica Job ID: 680-130081-2

### Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-16
Arkansas DEQ	State Program	6	88-0692	01-31-17
California	State Program	9	2939	07-31-16 *
Colorado	State Program	8	N/A	12-31-16
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-16
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-16
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-16
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-16
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-16 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-16
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-16
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-15-8	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-17
Washington	State Program	10	C805	06-10-17
West Virginia (DW)	State Program	3	9950C	12-31-16
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah